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Running Head: ADOLESCENT LEISURE AND THE FAMILY
ENVIRONMENT

The Influence of Perceived Family Environment on Adolescent Leisure Behaviour

Cath Price

A Report Submitted in Partial Fulfilment of the Requirements for the Award of Bachelor
of Arts (Psychology) Honours
Faculty of Community Studies, Education and Social Sciences
Edith Cowan University

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The Influence of Perceived Family Environment on Adolescent Leisure Behaviour

It has been claimed by many that the family environment is a source of influence for child and adolescent behaviour (Hendry, 1983). Research questions were asked to find out if, and to what extent, the family environment (as perceived by the adolescent) determines the adolescent's leisure participation, with whom these pursuits are carried out, and the satisfaction gained from these pursuits. Questionnaires containing measures of leisure participation, with whom they participate, and leisure satisfaction plus the Family Environment Scale (FES) Form R were administered to 313 students between 13 to 16 years of age in a Perth metropolitan state high school. In light of the results, several conclusions were warranted. (1) The extent to which the family, and other social groups (such as peers) can facilitate the satisfaction of the adolescent's leisure needs, will determine how much of the adolescent's leisure time is spent with the family, with friends, in a group, or alone. The extent to which the family can facilitate the satisfaction of the adolescent's leisure needs will depend on how it is perceived by the adolescent (that is, as an Authoritative, Indulgent, Authoritarian, or Neglecting family environment). (2) That adolescents do not spend an amount of time in leisure activities that is relative to the amount of satisfaction they gain from them. (3) That adolescents prefer to participate in leisure activities that satisfy their need to relax and relieve stress (and all types of leisure had this capability). Lastly, (4) gender is a consistent predictor of the types of leisure activities adolescents will prefer to participate in.

Author: Cath Price
Supervisor: Professor Alison Garton
Submitted: October 2001

Declaration

I certify that this thesis does not incorporate, without acknowledgement, any material previously submitted for a degree or diploma in any institution of higher education and that, to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where due reference is made in the text.

Signature: _____

Date: 1st March 2002

Acknowledgements

I would like to express my sincere gratitude to my supervisor, Professor Alison Garton for her time (and patience), and continuous support and encouragement through the year. I would also like to thank Dr Robin Harvey for her insight and advice on putting together sections of this report. Thanks must also be paid to Stephen Price, Alison Garton, and the Edith Cowan University, School of Psychology for their much-needed financial assistance in obtaining materials essential to the research. Lastly, I would like to thank the staff and students of Shenton College, for their generous assistance in the research process.

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Introduction

A central question in developmental psychology is how the environment (and what specifically in the environment) influences human behaviour and development. With respect to this question, adolescence has been the focus of a substantial amount of research, as it is a period characterised by rapid developmental change. Adolescence is a complex and contradictory stage of development and is sometimes experienced as a transitional crisis (Coleman, 1980), as the adolescent's self-image and self-esteem may be destabilised. Hence, adjustment in the adolescent years has critical implications for adult development, as well as for the health of society in general (Coleman, 1980).

During adolescence, one of the major developmental steps is the formation of a strong and coherent sense of identity - a self-concept (Shaw, Kleiber, & Caldwell, 1995). Leisure plays an important role in helping the adolescent develop a sense of identity, explore relationships with others, and learn about society. As Hendry (1983) stated, adolescence is a peak time of leisure needs. It is a time when individuals have more free time and opportunities (and perhaps less responsibility) than at any other time of their lives. All this available time is important, for it gives the adolescent the opportunity to develop a stable and positive self-concept through the effective use of and participation in leisure.

Many aspects of the environment, particularly the social environment, influence the individual during this stage of development. Their family and peers are the two main social agencies by which adolescents interact with their world, and both may potentially facilitate or complicate this developmental process through leisure (Shaw, Kleiber, &

Caldwell, 1995). Adolescents are not only socialised *through* leisure, but they are also socialised *into* leisure by these social agencies. Already much research has been conducted into the influence of peers on adolescent development (Berndt, 1979; Bixenstine, DeCorte & Bixenstine, 1976; Condry & Siman, 1974), so the influence of the family will be the focus of this discussion.

The family is the social institution that has the most significant impact on an adolescent's cognitive and self-concept development, identity achievement, and sex role identification (Pawelko & Magafas, 1997). Parents act as role models, set standards and give rewards, which all shape the adolescent's behaviour. Adolescents prefer parents' advice over that of their peers regarding important issues involving values and future decision making. But if parents are rejecting or indifferent, the adolescent will go to his or her peers for advice on important issues (Cornwell, Eggebeen, & Meschke, 1996). Disagreements develop between the parent and the adolescent, as the parent's emotional hold must decrease to allow the adolescent increased independence (Hendry, Shucksmith, Love, & Glendinning, 1993).

Parker (1976) readily states that the family is a dominant agency by which the adolescent is socialised into leisure habits and attitudes. Families that are supportive and caring may buffer young adolescents against risk as they foster competence and reduce exposure to negative experiences (Cornwell, Eggebeen, & Meschke, 1996). Because the family appears to be particularly influential during these early years of adolescence, the current study examined the way adolescents perceive their family environment and its relation to the type of leisure activities in which they engage.

Leisure in Adolescence

Adolescents participate in leisure activities to explore the world and to have fun, while at the same time they are also exploring themselves. Participation in leisure is a way of adolescents 'trying on' different identities (e.g., an athlete, a musician, an academic) to see how they might fit into their self-concept. The adolescent may find that a particular type of identity does not fit into his or her self-concept, thus, it will be discarded (e.g., quits guitar lessons) and the adolescent moves on to try on something else.

It can be said, about leisure in general, that the choices an individual makes regarding the type of leisure activities he or she pursues can affect the way that individual will see him or herself. That is, if participation in leisure gives the individual a genuinely positive experience then the individual is more likely to view him or herself in positive terms in general. If one is not engaging in worthwhile leisure activities, then adjustment and personal happiness will suffer.

There is evidence that with advancing age, leisure activities become more important in predicting life satisfaction (Beard & Ragheb, 1980b). It is important to begin developing a healthy 'leisure life' in adolescence, because as research has found, the leisure activities people engage in as an adolescent are predictive of the same kinds of leisure they enjoy participating in as an adult (Scott & Willits, 1998).

While the literature is sparse, it does suggest that participation in worthwhile leisure activities plays a role in the overall adjustment and personal happiness of individuals (DiLorenzo, Prue, & Scott, 1987). For the purpose of this study, the

definition of leisure will be the one used by DiLorenzo, Prue and Scott (1987), in which leisure is defined simply as what people do, and enjoy doing, when it is not necessary to do anything. Leisure can be free time, recreation, a state of mind, or a combination of all three, as long as it is freely chosen by the individual.

Surveys of leisure and recreational facilities indicate that young people are the most active sub-population in society (Rapoport & Rapoport, 1975 cited in Hendry, 1983). For, as Hendry (1983) suggests, it is “the need to find out for themselves” that is at the heart of adolescents’ leisure interests (p. 28). Adolescents’ participation in leisure is an urge toward increasing competence, involving exploration and experimentation, to deal better with their environment. Leisure activities are a part of the process of self-expansion by adolescents in the development of stable self-concepts, through which their environment is increasingly brought under their (perceived) control (Beard & Ragheb, 1983).

Theories of Leisure

Theories of leisure are at this stage fairly primitive, and fall broadly into two camps: sociological theories, which focus on the socialisation effects of leisure, and the way that a distinct lifestyle is formed by the convergence of one’s leisure interests and preoccupations; and community psychology theories, which view active leisure participation as the basis for physical well-being, mental health and social integration (Jobling & Cotterell, 1990).

One theory is put forth by Hendry (1983), who proposed a number of extensions to Coleman's (1978) "Focal Theory" in relation to adolescent leisure. He hypothesises that if the leisure activities available fit the requirements of the adolescent's various social roles (e.g., at school, at home, in heterosexual relationships), then the adolescent's development will be relatively straight forward. If a mismatch were to occur (between leisure pursuits and the adolescent's expectations and interests), it could predict the turmoil and anxiety that is often characteristic of the period of adolescence.

But what about the developmental effects of leisure? For example, "the development of competence and self-esteem through achievement and mastery of skills, or the development of social responsibility through acceptance by a group, and attachment to the group and the community" (Jobling & Cotterell, 1990, p. 185).

The importance of leisure should be recognised as going beyond providing pleasure and relief from boredom to promoting personal growth and fulfilment for individuals and communities (Jobling & Cotterell, 1990). It is in the context of promoting healthy, personally competent and socially integrated youth that this discussion of adolescent leisure activities is set.

Leisure Satisfaction

There are many variables that affect adolescent leisure choices (such as age, gender, social class, past exposure, and possibly family environments), and it has been observed that the satisfaction elicited from leisure is a major determinant of future choices (Beard & Ragheb, 1980b). Beard and Ragheb (1980b) found positive

correlations between the extent of participation in different types of leisure and the satisfaction gained from the activities. The strongest relationships (in order from strongest to weakest) were found in miscellaneous activities (such as hobbies and cultural activities), sports activities, social activities, outdoor activities, and mass media consumption.

Adolescents usually report participation in leisure as a satisfying experience. Beard and Ragheb (1980a) identified that adolescents (and adults) actually participate in leisure to satisfy several individual needs (such as, the need to feel free). Six needs were identified as part of Beard and Ragheb's Leisure Satisfaction Scale (1980a), and these are described below:

Psychological needs are met through participation in activities that offer freedom of choice, and challenge the individual to utilise their abilities and talents. Thus, the individual can achieve a sense of accomplishment, express one's individuality, and seek self-expression. These activities become regular if they interest the individual, absorb their attention, yield enjoyment, and help them to explore and discover.

Educational needs involve the individual's need to seek intellectual stimulation in leisure, in order to learn about themselves and their surroundings. Hence, there is an appetite for new experiences, a wish to satisfy curiosities, and an opportunity to try new things.

Social needs are satisfied through rewarding relationships with other people, which contributes to the healthy social adjustment of the individual. Thus, there is a need for each person to belong, to identify with groups, and to gain attention and recognition that help individuals to gain social respect and others' esteem.

Relaxation needs are an obvious part of leisure satisfaction and involve restorative activities such as play and sports. These types of leisure should achieve rest, relaxation and relief from the stress generated from work, and the strain of life.

Physiological needs are satisfied when the individual participates in activities that challenge and restore them physically, develop their physical fitness and enhance health.

Lastly, aesthetic needs refer to the physical environments where individuals choose to engage in their leisure. The experience is usually more satisfying for the individual if these environments are beautiful, interesting and generally well designed.

These needs can be satisfied through participation in a wide variety of leisure activities, some of which are considered to benefit adolescent development while others are considered to have adverse effects on their development. These activities and their effects will be discussed below.

The Benefits of Leisure for Adolescents

The well being of an adolescent is associated with choices made during free time (Pawelko & Magafas, 1997). Leisure is the prime social sphere in which adolescents can make choices, develop and maintain relationships, as well as freely pursue and experiment with knowledge, and find ways for enjoying personal growth (Csikszentmihalyi, 1990, cited in Glancy & Little, 1995).

Leisure activities are particularly important during adolescence because they provide these young individuals with opportunities to explore and form their autonomy

and identity, as well as often being the means to desired social ends (Iso-Ahola & Crowley, 1991). That is, participation in certain leisure activities may be instrumental in, for example, gaining popularity with peers, by perhaps being good at sports. Also, via leisure participation, adolescents acquire additional knowledge of the socio-cultural environment, practice social and co-operative skills, experience intellectual or physical attainments, and explore a variety of peer, family, and community roles (Gordon & Caltabiano, 1996).

According to previous research findings, the type of free time activities that may be beneficial developmentally for adolescents are those that involve challenge, effort and concentration (Shaw, Kleiber, & Caldwell, 1995). This is because these types of activities may be an example of important transitional situations for adolescents that move them into the adult realm of work - where skills like effort and concentration will be invaluable.

What will become clear from the proceeding discussion is that leisure activities provide contexts in which adolescents develop skills and accomplish developmental tasks. Although individual leisure activities may fulfil separate needs, this study looked at five categories of leisure thought to have particular relevance for adolescents today. These categories are sport activities, social activities, screen activities (as identified by Garton & Pratt, 1991), miscellaneous activities and risk activities.

Sport Activities

The sports available to adolescents in Australia can range from the team sports of football and netball, to alternate forms such as skateboarding, horseriding or karate.

In the majority of cases, sport, as a category of leisure, involves physical activity and interaction with others (not necessarily team members). There is strong support for why sports are valued as an essential component of adolescent leisure time.

Gordon and Caltabiano (1996) suggested that a decrease in active leisure could be linked to social isolation and risk of future heart disease. Exercise has also been shown to have positive effects on motor skills, depressive symptoms, self-concept, and self-esteem among youth (Garcia, Broda, Frenn, & Coviak, 1995). Also, Beard and Ragheb (1980) have found that the younger the individual, the more satisfaction is gained from sports activities.

Steptoe and Butler (1996) also found, in their cross-sectional analysis of 16 year olds, a positive association between emotional well being and the extent of participation in sport and vigorous recreational activity. It is further suggested by Shaw, Kleiber and Caldwell (1995) that sports may be an important type of transitional activity for adolescents. Not only do sports represent a physical and mental challenge, but they also may play a role in adolescent development by providing an identity (e.g., “I am a soccer player”) based on a sense of competence and/or identification with that social group (e.g., a soccer club).

In many community programs focused on ‘at risk’ children and delinquents, sport is almost always recommended as an essential component (e.g., Peiser & Heaven, 1996) to encourage exposure to more of these positive experiences.

Social Activities

Adolescence is the period when an individual's social realm expands beyond the family, as increasing attention is devoted to relationships with the peer group.

Buhrmester (1990) observed that elementary and junior high school students with more intimate friendships were more likely to be described as better adjusted and more socially competent. It has been found that the amount of interpersonal activity is a predictor of individuals' subjective feeling of well-being, and that time spent in activities such as voluntary and social organisations contributed to individuals' adjustment (Beard & Ragheb, 1980b).

Social activities include speaking on the phone to friends, 'hanging out' with a group, shopping with friends and attending parties with peers. Studies have found that the most frequent and preferred leisure activity pursued by adolescents was sociable in nature (Fitzgerald, Joseph, Hayes, & O'Regan, 1995; Garton & Pratt, 1987).

Social activities, which constitute a large component of adolescent free time, might be expected to be beneficial because they may assist in the "social relatedness aspect of identity formation" (Shaw, Kleiber, & Caldwell, 1995, p. 3). Socialising with peers is a positive developmental experience (most notably for females) in that it provides a "sounding board" for the development of views free from family members and teachers (Kleiber & Kelly, 1980, p.111). In this sense, peer groups are an important base of security outside the family.

Kleiber and Rickards (1985) argue that being with significant peers is often a "primary condition for satisfaction" among adolescents (p.298). Peers provide a more

suitable context than family for fulfilling age-appropriate needs for excitement, affiliation and self-expression.

From participation in social activities, adolescents learn to express empathy, appropriate emotional behaviour, the power of self-initiation, and mature approaches to solving problems through mutual respect and agreement. Leisure time with peers gives an adolescent opportunity to develop independence skills they will need as adults. They develop self-esteem, social competence, and a self-image. Adolescents can try new things with their peers without harsh consequences and learn from their mistakes (Hendry, Shucksmith, Love, & Glendinning, 1993).

Screen Activities

A significant influence on today's adolescents is the media. Some researchers have suggested teenagers are surrounded by an "electronic environment" that influences their development and growth (Jurich & Collins, 1996). Screen activities include watching television and videos, using the internet, and playing computer games (in general, an activity that involves spending time in front of a screen). As television is one of today's most pervasive and subversive influences in the family home, most of the research in this area has tended to neglect the effects of other screen activities. Therefore, the effects of watching television will be the main focus of this discussion.

Larson and Kubey (1983, cited in Jurich & Collins, 1996) reported that the influence of television and movies as socialising agents depends on their ability to draw in teenagers as participants - mobilising their attention, emotions, and motivation to interact with the medium's content. Although television does present images of possible

adult roles, the images presented are often stereotypes, and television's influence is all the more powerful today given the sophistication of the media and their potential to engage the viewer.

A dramatic increase in at-home viewing of VCRs among the 10- to 19-year-old age group was noted in America in the mid-80s (Jurich & Collins, 1996), as teenagers are more often renting movies and watching them with friends. Also, in a recent Australian survey by Gordon and Caltabiano (1996), it was reported that both urban and rural adolescents spent the highest number of hours a week watching TV and videos, as opposed to other leisure activities.

Hearn (1990) summarises three motivations behind adolescents' sizeable consumption of screen media. The first motivation is arousal management. This involves motivations like entertainment, diversion, relaxation, passing the time and so on. The second is pertinent to social needs and includes viewing for companionship, conversational utility, and identification with characters and so forth. The final motivation is informational and includes learning and reality exploration.

It is generally thought that television would have little developmental potential since it rarely involves challenge or effort. Watching television is passive leisure (which is good for relaxation purposes, but there are other activities that satisfy this) as adolescents are not involved or participating in the social settings and interactions they are viewing (Shaw, Kleiber, & Caldwell, 1995). The individual cannot take as much away from a television experience as opposed to participating in more interactive leisure.

Watching television as a family can also have adverse effects. Orthner and Mancini (1990) concluded from their study examining the relationship between shared family leisure activities and family bonding, that leisure activities involving little or no communication provide little benefit to families and may actually hurt the relationship. They found that watching television as a family may represent a false front that suggests togetherness when the reality in the relationship is quite the opposite.

Miscellaneous Activities

Individual activities (those that are participated in alone such as reading, playing a musical instrument, drawing) may have considerable meaning for the individual participant, and indirectly they may facilitate family cohesion. An individual may replenish personal energy through the relaxation and contemplation that accompany single participant pursuits (Orthner & Mancini, 1980). While sewing, reading, writing in a diary or drawing by oneself do not afford opportunities for participation with others, they may enable a person to enter into intimate and more demanding social interaction with renewed interest (Orthner & Mancini, 1980). Though humans are social beings, an individual still requires time for solitude and private contemplation: "individual activities provide opportunities for this recuperation from social interaction" (Orthner & Mancini, 1980, p. 313).

However, participation in too many of these kinds of activities, and not enough social and physical interaction with the outside world, does not benefit the developing individual. Those who were encouraged to obtain leisure satisfaction solely from vicarious, solitary, passive pursuits (e.g., from television or reading) may suffer as adults

because they were denied the opportunity to fulfil a “need for the optimal arousal and incongruity present in many organised, peer-centred activities” (Iso-Ahola, cited in Hultsman, 1993, p. 161).

Risk Activities

Risk activities have been defined as those that “can compromise successful adolescent development and jeopardise the life-chances of youth” (Cornwell, Eggebeen, & Meschke, 1996, p.142). One of the most prevalent risk activities in adolescents’ lives is recreational drug use. Drug use (i.e., illegal drugs) during adolescence is a destructive behaviour that challenges adolescent development.

One study has found that adolescents whose emotional and recreational needs are not being met by their family and community are more likely than others to turn to drugs (Mainous, Martin, Oler, Richardson, & Haney, 1996). This state of unfulfilled needs may also propel adolescents to form gangs (which provide acceptance and offer security through rules and rituals) and make them more likely than others to fail to foresee the consequences of their actions and take unreasonable risks.

A state of high wants and needs that cannot be gratified simply in a complex society may result in leisure boredom, which is usually the precursor to behaviours like using drugs and other delinquent behaviours (Iso-Ahola & Crowley, 1991; Mainous et al., 1996). Adolescents who spend too much time in activities like watching television and videos usually report boredom because the activities involve little demand (effort), concentration and challenge (Shaw, Kleiber, & Caldwell, 1995). Involvement in

recreational activities that do require these characteristics are more likely to reduce leisure boredom and reduce the risk of participation in risk activities such as drug use.

However, delinquency is not just a pattern of behaviour associated with a lack of recreational involvement, it may also be recognised as a kind of leisure-based counter-socialisation. That is, the 'games' of delinquent adolescents just happen to be in opposition to the law, social systems, and the values of traditional socialisation in general (Kleiber & Kelly, 1980).

The pleasure and excitement derived from delinquent acts (similar to the pleasure experienced in traditional leisure activities) should also not go unrecognised as a contributing factor to delinquent behaviour. The issue of trying to build an identity is no less pressing in this youth subculture, but "it is generally resolved in reaction to, rather than in accordance with, the mainstream adult culture" (Kleiber & Kelly, 1980, p.111).

Gender Differences in Leisure Participation

In reviewing the literature, gender was repeatedly found to be a significant predictor of differences in adolescent leisure activity. Studies done in Ireland (Fitzgerald et al., 1995) and Australia (Garton & Pratt, 1991) have shown that boys are more likely to participate in sports and computing (Colley, Griffiths, Hugh, Landers, & Jaggli, 1996) than girls. Adolescent boys are also more likely to use sports and recreation as a means of coping with stress (Gibbons, Lynn, & Stiles, 1997). Although pre-adolescent girls are often confident and active in outdoor environments, as they reach mid-teenage years,

their participation in physical and outdoor activities frequently declines and these environments are perceived as being in the male domain (Culp, 1998).

Gibbons et al. (1997) discussed a potential theory of socialisation to account for this discrepancy based on the different interactive styles boys and girls adopt during childhood play. Specifically, girls' interactions are more facilitative and enabling than boys' and may be functionally adaptive in that they make them more sensitive and effective as mothers. So girls' preference for a more enabling interactive style may make team sports (characterised by competition and hierarchy) less attractive to girls. At the same time, the features of sports activities that repel girls from participating make them appealing to boys, whose preferred interactive style is competitive.

However, the high levels of involvement and challenge reported during sports participation are also found during participation in other kinds of leisure activities. Thus, while girls and boys may engage in different activities, they may be similarly having experiences that are essential to accomplishing developmental tasks. For example, it is commonly found that females report higher participation in social activities than males (Colley et al., 1996; Richards & Larson, 1989). Girls' participation in leisure with an emphasis on social, cultural and educational characteristics may partly reflect women's earlier social maturity (Hendry, 1983).

The Influence of the Family on Adolescent Development

The family is an environment of particular importance in individual development (Meschke & Silbereisen, 1998), and influences some areas of adolescent development

more than others. For example, relatively strong family influences have been found for religious beliefs and conservatism, and also whether siblings develop common interests, such as an interest in music (Hoffman, 1991).

While decreased levels of family involvement may be typical of behaviour in this period of development, it does not mean that the family has less influence on adolescent behaviour. This is the subject of a large body of early literature that was polarised by a lack of substantive research. One body of research suggested that the family has little influence on adolescents, who reject their parents in preference for their peers. Other studies, however, indicated that the family continued to have a major impact on adolescent choices and behaviour during adolescence (see Larson, 1972 for review). These two camps still have a strong presence in today's literature.

While early studies of socialisation gave an idea of the interactional nature of family and peer influences on behaviour in adolescence, the adolescent as an individual was depicted as an "outcome", passively formed by such powerful family forces. But many now seriously object to this model of socialisation (Hauser, 1991; Steinberg & Morris, 2001), reminding us that adolescents exert an influence in moment-to-moment interactions with their parents. The idea that parental behaviour is the cause and adolescent personality and behaviour is the effect is obviously an oversimplification.

The influence of the family on adolescent behaviour can be understood in terms of social learning theory (Muuss, 1988). This approach recognises that while people learn by direct experience, it also emphasises the importance of observational learning, modelling and imitation in human development. Thus teenagers learn different behaviours by identifying with salient others such as parents, teachers and peers.

Adolescents regulate their actions, according to the social learning perspective, on the basis of consequences that they experience directly, of those they see happening to others, and of those they create for themselves (self-reinforcement).

Bronfenbrenner's ecological theory of human development (Bronfenbrenner, 1979) has also been used to explain findings of parent-adolescent influences. This approach accepts that various people exert influences on an individual, where different ecological systems are in a continuous and complex interaction (Muuss, 1988). This is the context in which an adolescent chooses which leisure activities to participate in and how often.

In ecological systems theory, it is posited that two areas of influence, the microsystem and the macrosystem, might be examined regarding the outcome of adolescent behaviour (that being, their choice of leisure) (Meschke & Silbereisen, 1998). The macrosystem is the larger context in which the individual functions and it may include belief systems, socioeconomic status, or ethnicity. The microsystem is defined as past and present activities or roles of the individual and his or her face-to-face interactions - for most adolescents, the family is the primary microsystem, usually followed in importance by friends and school (Muuss, 1988).

From this perspective, research has found that the influence of parental or peer group expectations depends on the nature of the situation and the adolescent's perception of the relative competence of peers or parents as appropriate guides for behaviour. More specifically, it was found that "for issues and concerns of immediate relevancy to the adolescent's life, such as drug involvement, peers play a crucial role. For issues relevant to basic values, such as religiosity, and to the adolescent's future,

such as educational aspirations, parents are much more important than peers” (Muuss, 1988, p. 314).

A basic assumption of most theories of adolescence reflects the belief that the initial parent-child bond begins to loosen as the child grows older, while simultaneously, the young adolescent’s friends and peers become increasingly influential and seem to contribute significantly to the process of development and socialisation (Muuss, 1988).

Certainly, one of the strongest and consistent age trends Richards and Larson (1989) noticed was a shift away from doing things with the family and toward doing them alone or with friends. This shift, they noted, was hardly surprising as it reflects the increasing behavioural autonomy associated with this age period.

Still, the quality of family relationships is widely recognised as a critical factor in the psychological adjustment of the adolescent (Borinne, Handal, Brown, & Searight, 1991). Lerner and Galambos (1998) reported that for most young people, there is a continuation of warm and accepting relations with parents and that optimal adjustment occurs among adolescents who are encouraged by their parents to engage in “age-appropriate autonomy” while maintaining strong ties with their family (p. 416).

Hendry (1983) regards the family as the launching pad of socialisation. Psychologists and sociologists agree that the family, as the primary context in which children live, contributes significantly to determining adolescent behaviour and, thus, adult success (Cornwell, Eggebeen, & Meschke, 1996). When Necessary and Parish (1996) evaluated the relationship between students’ perceptions of their family members and how they interact with one another, they found strong support for the notion that “what individuals become is likely to be associated with how members of the family are

perceived to interact together” (p.749). They even suggest that family members need to be more attentive to the messages they convey through their actions as well as their attitudes, and strive to be as positive as possible if they truly wish to benefit all concerned.

Werner (1992, cited in Hernandez-Guzman & Sanchez-Sosa, 1996) has found the quality of family of origin and nuclear family relationships to be associated with psychological health and distress, life stress, and health-enhancing behaviours of young adults. Moos and Moos (1994) have also claimed that a child’s personal characteristics, coping and well-being are a direct outcome of the family environment.

Garbarino (1982, cited in Turner & Scherman, 1996) states that the development of a positive self-concept in young people is contingent upon the availability of support systems, which he defines as social arrangements offering nurturance, providing feedback, and serving as resources (like one’s family). Participation in leisure activities is also part of the process of developing a positive and stable self-concept during adolescence, and if this is contingent upon the availability of support systems like the adolescent’s family, perhaps so too are the types of leisure activities in which the adolescent will endeavour to participate.

Even Hendry (1983) has stated that the types of leisure chosen by young people, and with whom they participate with, is strongly influenced by the patterns, habits and values of their general life style and background. However, this relationship has only been examined in light of the differences between social classes in Britain. Hendry (1983) also noted that the “patterns by which the child is inculcated with the values of

the adult world - in particular his 'significant others' in the family have a profound effect on later leisure choices" (p. 29).

No one denies the role of adolescent self-determination in leisure participation. However, it seems that the family environment also has a role to play in the attitudes towards leisure and the choices adolescents make regarding the type of leisure activities in which to participate. Assuming this is the case, can a relationship be found between adolescents' perceived family environment and their participation in certain leisure activities?

The Influence of the Family on Adolescent Leisure Behaviour

As the review above has shown, families play a major role in the socialisation of children's behaviour. As children develop into adolescence other, extra-familial, influences increase, but the family remains a major agent of socialisation (Foxcroft & Lowe, 1995).

Russell and McLean (1998) summarised research and found that family has an influence on leisure. For children, parents are a primary socialising agent for developing leisure interests and behaviours. Later, in adolescence, parental leisure values often become the basis for lifestyle development, and these influences may be positive or negative on adolescents' lives.

A meta-analysis of the literature by Holman and Epperson (1984) also found interesting results that require further investigation. They treated family factors as independent variables and leisure behaviours as dependent variables. Causation was not

addressed in this research, but it does appear that some family factors may influence leisure behaviour. It is understood that Holman and Epperson (1984) only looked at family factors affecting family leisure behaviour, but in reality it could be postulated that family factors also affect individual leisure behaviour.

Montemayor (1982) conducted an early investigation into this area by finding out how the quality of the adolescents' relationships with parents (i.e., level of conflict) and peers affects the amount of time they spend by themselves, and the type of people they associate with in their free time. He found that adolescents spent equal amounts of time with parents and peers but engaged in very different types of activities - work and task activities with parents, play and recreation with peers. Also, the time spent with parents was negatively correlated with peer time for females and time spent alone for males.

Montemayor (1982) also reported that the amount of leisure time adolescents spent with parents generally was not related to the level of conflict with parents. The only exception was that adolescent-father leisure time spent together was related to greater frequency of conflict between the adolescent and his/her mother.

While it is well accepted that adolescents have more freedom than they did as a child, this freedom is still dependant on their family environment and how necessary their parents perceive their freedom to be. For example, Hultsman (1993) found that parental influence over adolescent decisions not to participate in organised leisure activities was perceived (by the adolescents themselves) to be greater than the influence of other social agents (such as significant other adults and peers).

This result supports the significance of the family/parental influence in the overall development of adolescents. This significance has been demonstrated by

findings that parents remain the major providers of advice and guidance throughout adolescence. The child's introduction into formal recreation is usually the product of the mother's influence, where the mother actively screens or qualifies the program before allowing her child to become involved in the "final stage of a purchase decision" (Hultsman, 1993, p. 152).

Clearly, family relationships and leisure behaviour are still an under-researched area, as there are limited sources that actually look at family factors influencing leisure behaviour. Also, the research above may seem to imply that children and adolescents will eventually be socialised into the leisure habits that their parents have adopted. However, this may not be the case. The adolescent is socialised *through* leisure and *into* leisure activities mainly in the context of his or her family environment, and effective socialisation into healthy leisure activities may depend on the type of family environment (e.g., independence-oriented, achievement-oriented, conflict-oriented, support-oriented) in which this takes place.

If the family environment is not supportive of the adolescent's needs, then satisfaction may be sought from elsewhere, such as peers, or from the participation in certain leisure activities (Robertson, 1999). For example, if delinquent behaviour is included as a leisure activity, there is quite a substantial body of literature addressing the family's role in this type of adolescent behaviour, which can be reviewed.

The nature of the family and the family experience has long been viewed as relevant in understanding adolescent delinquency. Peiser and Heaven (1996) investigated family influences (for example, perceived family relationships and parental discipline style) on self-reported delinquency among Australian high school students.

Their results supported the expectation that parental discipline style (which is a factor of influence within the family environment) predicts self-reported delinquency.

The researchers prescribed interventions for families with delinquent teenagers that were designed to enhance emotional support and bonding among family members, as well as teaching them how to express their feelings more directly, and increasing participation in social and recreational activities. From these findings, it could be postulated that adolescents who report high levels of family cohesion, expressiveness and active-recreational orientation should also report less participation in risk leisure activities.

This is similar to Foxcroft and Lowe's (1995) investigation of the relationship between adolescents' perceived family life and self-reported drinking, smoking and other substance use. They obtained adolescents' perceptions of their family interactions and categorised them as Authoritative, Indulgent, Authoritarian or Neglecting. They found that perceived family socialisation behaviours were significantly related to a range of self-reported adolescent drinking, smoking and other substance use involvement, but these relationships varied by type of substance, and were also different for males and females.

On the whole, males were more likely than females to report heavier drinking, and males who reported perceptions of Neglecting family behaviours (low support and low control) also reported the most "usual" (i.e., regular, 'all the time') drinking behaviour. Perceptions of Authoritative, warm-directive family behaviours (high support and high control) were related to lower, more sensible alcohol use.

This picture is similar to the relationship between family type and other substance use behaviours. Here, Foxcroft and Lowe (1995) found that males who perceived their families as Authoritarian (low support and high control) and/or Neglecting reported more substance use involvement. These male adolescents were more likely to know a user, more likely to have been offered the substance and more likely to have used the substance than those adolescents from Authoritative family environments.

Meschke and Silbereisen (1998) have also found family influences on adolescent leisure participation in their investigation of German adolescent leisure activities (categorised as risky, social-romantic, and creative-introspective) and correlates such as childhood play, parent-adolescent interactions, nationality and gender. They found that the addition of parent-adolescent interactions (e.g., parental monitoring and shared interests) to their regression model resulted in a significant increase in the predicted variance for risk leisure and miscellaneous leisure participation. They confirmed their expectations and previous research that higher levels of parental monitoring (control) were associated with lower levels of risky leisure, and that shared family interests were positively related to levels of participation in adolescent creative (miscellaneous) leisure.

Focus of the Present Study

While these studies demonstrate a link between family variables and adolescent leisure pursuits involving risk activities, there is still a lack of evidence that the family

environment influences participation in the other types of leisure (e.g., the sport, screen, and social activities) available to adolescents. There is also a lack of research addressing the family's influence on whom these activities are carried out with. For example, does the family environment encourage the adolescent to seek out solitary leisure pursuits over activities that involve a peer, a parent or another family member? In looking toward answering these questions, the present study was designed to examine the leisure behaviours and perceptions of family characteristics of adolescents 13 through 15 years of age.

It must be explained that the rationale for the focus on this age group stemmed from the results of previous research indicating that the vulnerability of these children, who are called early (through to mid-) adolescents, appears to be more dependent on the family context than is the vulnerability of older adolescents (Cornwell, Eggebeen, & Meschke, 1996). During middle adolescence, the importance of peers expands, while interaction with the family members may decline. Although peers are important to younger adolescents, they are not as influential as they are in the lives of older adolescents. If peers condone behaviours such as drug use and unprotected sexual activity, the older adolescent who was not part of a successful family when younger may lack the maturity and competence to cope with those hazards (Cornwell, Eggebeen, & Meschke, 1996)

In contrast, during early adolescence, when young people are establishing independence and assuming responsibility for decisions and behaviours that will eventually shape their adult lives, they view their parents as the most important adults in their lives and feel that communicating with their parents is one of the most enjoyable

and important shared family activities (Cornwell, Eggebeen, & Meschke, 1996).

Families that are supportive and caring may buffer young adolescents against risk as they foster competence and reduce exposure to negative experiences. On the other hand, young adolescents who lack supportive family environments may lack the resources to respond appropriately to challenges in the external world (Cornwell, Eggebeen, & Meschke, 1996). Because the family appears to be particularly influential during these early years of adolescence, the current study examined the family contexts of those young adolescents.

It is the focus of this research to examine the role of family functioning (from the perspective of the adolescent) in determining the leisure pursuits of the adolescent; who (and how many i.e., group / individual) these pursuits are carried out with; and the satisfaction gained from these pursuits. Specifically, this study is interested in finding out to what extent family characteristics shape self-reported leisure behaviours among teenagers.

It is recognised in family research that there can be no single reality of family life, but that each member has separate experiences of the family. Research has also found that adolescents' perception of their family has a more powerful impact on their development than the objectively measured family situation (Schneewind & Ruppert, cited in Schmitt-Rodermund & Vondracek, 1999). Therefore, adolescents' self-report on their perceived family environment should be a valid measure of the family climate they inhabit.

Also, the quality of the family environment, and not the structure of the family, was of central interest because previous research has demonstrated the quality of family

interactions (i.e., perceived family conflict) to be a critical factor in child and adolescent adjustment (Borrine, Handal, Brown, & Searight, 1991).

The present study was designed to examine adolescent leisure behaviour and its relation to the perceived family environment of the adolescent. An individual's socialisation and identity development is based on leisure involvement. As the family environment may promote or inhibit these processes, it may be an indicator of the adolescent's leisure behaviour. By identifying family environments that facilitate or impede adolescent development through leisure and into leisure, it is then feasible to think that other social agents (such as schools and other community organisations) can promote development where the family fails, or encourage families to take an active role in the development of healthy adolescents through leisure. It is therefore important to investigate whether an adolescent's leisure behaviour is related to how he or she perceives his or her family environment.

The first objective of the present study was to identify the preferred types of leisure activities adolescents participate in and with whom. The second objective was to examine the relationships between the time spent on a leisure activity and the amount (and type) of satisfaction gained from that activity. This is important in appreciating whether adolescents are spending their time in the most satisfying leisure activities, and which types of leisure activities are satisfying which needs. The third objective of this study was to investigate gender differences in leisure behaviour.

Finally, this study explored the relationship between perceived family functioning and adolescent leisure behaviour. It was anticipated that perceived family environment would be related to the type of leisure preferred by the adolescent; with

whom it was participated with (be that alone, with one or two friends, in a group, or with family or a family member); how many hours was spent on the leisure activity; and the needs that were met (the type of satisfaction gained) by participation in leisure.

To examine the relationship between family functioning and adolescent leisure activities, four family typologies were derived from scores on various sub-scales from the Family Environment Scale (FES). Adolescents' perceptions of their families were categorised as Authoritative, Authoritarian, Indulgent or Neglecting, as in the Foxcroft and Lowe (1995) study. These specific research questions will be asked:

Firstly, to what extent is the family environment (as perceived by the adolescent) related to adolescent participation in the different categories of leisure activities?

Secondly, to what extent does the family environment (from the perspective of the adolescent) determine who (and how many others) these activities are done with? This is of interest to the research because of the possibility that different types of leisure activities are associated with different social groups. For example, watching television is known to be an activity that is usually participated in alone. Is it the family environment that encourages this withdrawn type of leisure? Also, does the adolescent spend more time in leisure with family, with peers (one or two friends), or in a group?

Thirdly, to what extent is the family environment (perceived by the adolescent) related to adolescents' engagement in activities from which the adolescent derives a certain type of satisfaction? In other words, is adolescent participation in activities rated as satisfying certain needs, related to how they perceive their family environment? This information is important for it may give us an indication of what type of family environment gives rise to certain needs during adolescence. That is, are adolescents

instrumental in developing a positive self-concept by participating mostly in activities that make them feel worthy, for example, “My leisure activities give me a sense of accomplishment”?

And in particular, what is the relationship between the Active-Recreational Orientation (a sub-scale of the FES) of the family (i.e., high or low) and what activities are chosen, how much time is spent in leisure, with whom they participate and what amount and type of satisfaction is gained.

Method

Research Design

This study utilised a survey design, with a non-random sample of high school students responding to a self-report questionnaire.

Participants

One hundred and fifty-five Year 9 and 158 Year 10 students attending a state metropolitan high school in Perth's western suburbs completed the questionnaire. Participants were sampled from one school exclusively to control for socioeconomic effects.

Although 460 students were invited to take part in the study, there were 368 students whose parents agreed to their child's participation and who were present on the day scheduled for the administration of the questionnaires in class. There were originally 368 questionnaires filled out by the students, however, 55 were omitted because they were incomplete. Only those participants who filled out both questionnaires were included in the analysis, and the total sample consisted of 313 students.

The sample comprised 173 males, with a mean age of 14.13 years (S.D.= 0.67), and 140 females, with a mean age of 14.16 years (S.D.= 0.65). The ages ranged from 13 to 15 years with an overall mean age of 14.14 years (S.D.= 0.66). Family sizes ranged

from a minimum of two to a maximum of 11 members, with the most common family size (38.3%) having four members. Family structure was varied, though most were nuclear families. Ninety-three percent of adolescents reported living with their mother, 72.5% reported living with their father, 68.7% reported living with a sister, and 66.4% reported living with a brother.

Materials

The study utilised the constructed “Leisure Questionnaire” and the Family Environment Scale Form R. These were used to measure leisure participation, satisfaction, and how the adolescents perceive their family environment. Participants’ demographic information was also collected.

The Leisure Questionnaire contained several sections, and these will be detailed below.

Section 1 asked participants to provide demographic information (gender, age and post code). Additionally, information on the composition of the adolescents’ family (such as who lives in their house with them) was also collected.

Section 2 required participants to select the leisure activities they participate in from a list of 21 activities (five sports activities, five social activities, four screen activities, three miscellaneous activities and four risk-behaviour activities). The activities included on the list were those identified by Chuah (2000) as popular activities adolescents participate in. Participants were also given the option to add up to five “other” activities to the list.

Section 3 asked participants to review the activities they had selected in the previous section and determine the five activities they spent the most amount of time on per week. Participants were required to rank those five activities from the activity they spend the most amount of time on to the activity they spend the least amount of time on (also indicating how many hours per week was spent on each activity). Lastly, they were required to nominate whether they participate in each of their top five activities (most of the time) “by myself”, “with one or two friends”, “in a group”, or “with my family member/s”.

Section 4 contained an adaptation of the Leisure Satisfaction Scale (Beard & Ragheb, 1980). This scale was used to measure satisfaction derived from participants’ engagement in leisure activities. The authors derived from the existing literature on leisure and recreation several needs of individuals that leisure activities may satisfy. One indicator item from each of the six needs was selected in order to assess the extent to which each of these needs is satisfied through an individual’s leisure activities.

The needs are Psychological, Educational, Social, Relaxation, Aesthetic and Physiological. The six items (for example, “this leisure activity gives me a sense of accomplishment”) were rated on a 5-point Likert-type scale ranging from “almost never true for me” (1) to “almost always true for me” (5). The full scale has been found to be reliable and valid in the measurement of leisure satisfaction (Beard & Ragheb, 1980), and the shortened version was used satisfactorily by Chuah (2000). (See Appendix A for the questionnaire, sections 1 to 4.)

The Family Environment Scale (FES) developed by Moos and Moos (1994) portrays the interpersonal relationships among family members, the directions of personal growth that are emphasised in the family, and the basic organisational structure of the family (Forman & Forman, 1981).

The FES Form R asks participants to respond either true or false to 90 statements about how they perceive their family. Responses to these 90 items yields 10 subscale scores (Cohesion, Expressiveness, Conflict, Independence, Achievement Orientation, Intellectual-Cultural Orientation, Active-Recreational Orientation, Moral-Religious Emphasis, Organisation and Control) to provide a “snapshot” of how the adolescent perceives his or her family environment.

Test-retest reliabilities on the 10 subscales, with a two-month interval between assessments, were reported by Moos and Moos (1994) to be all in acceptable range. They varied from a low of .68 for independence to a high of .86 for cohesion. Inter-correlations of the 10 scales vary from .01 to .53 (mean of .20) for adolescent respondents, and the scale has been found to have good construct and discriminant validity. A description of each of the subscales is provided in Appendix B, with some examples of the questions.

The categories of family type, used in this study, were derived from four of the subscales in the FES. Cohesion and expressiveness subscales were combined to measure the Support orientation of the family, and the conflict and control subscales were combined to measure the Control orientation of the family. Four categories were then defined as Authoritative (high support, high control), Indulgent (high support, low

control), Authoritarian (low support, high control) or Neglecting (low support, low control) family types (Foxcroft & Lowe, 1995).

Procedure

After the School of Psychology Ethics Committee approved the research, arrangements were made with the school for the participants to fill out the questionnaire. The time and place of administration were at the convenience of the school, and the questionnaires were administered to students in classroom groups. The researcher informed the students that by filling out the questionnaire they would be taking part in a study on adolescent leisure activities, and how that might relate to the family environment. See Appendix C for the researcher's entire script, which was read out before the administration of the questionnaires.

The questionnaires were then administered in a strict and uniform format. However, the teacher was available to respond to questions if students had difficulty in answering or understanding parts of the questionnaire. Some teachers exercised less control than others, in terms of maintenance of silence and preventing participant interactions. The possibility of peer influences on participants' answers therefore has to be considered in the data interpretation.

The completion time of the questionnaire ranged between 15 minutes to 50 minutes. (These procedures were followed to maximise the chances of valid and reliable responses from the participants.)

Results

Preferred adolescent leisure activities and whom they participate with

A total of 113 leisure activities were reported by the participants (93 of which the participants had added themselves). The researcher grouped all activities reported into five categories. These categories were: *sport / physical activities*, e.g., football, tennis, sailing, skateboarding, horse riding, martial arts; *social activities*, e.g., going to parties, hanging out, talking on the phone, shopping, being a member of a club; *screen activities*, e.g., watching television / videos, spending time on the internet, going to the movies, playing computer games, 'vegging out' (watching TV, videos and using internet and computer); *risk activities*, e.g., drinking alcohol, illicit drug use, vandalism, smoking cigarettes, other illegal activities; *miscellaneous activities*, e.g., playing a musical instrument, sleeping, drawing and painting, listening to music, spending time with pets; (see Appendix D for a complete list of activities and category groupings).

Before analyses commenced, the data were screened for outliers, in particular relation to the number of hours per week spent in leisure. It was decided that all cases three standard deviations above or below the mean were removed in order to reduce the skewness of the data.

The most frequently mentioned leisure activities were social activities where participants reported an average of 3.01 activities (see Table 1). The second most frequently mentioned were screen activities followed by miscellaneous and sport

activities. The least frequently mentioned activities were those belonging to the risk category, where participants reported an average of .75 activities.

Table 1.

Reported participation in activities from each leisure category and mean number and standard deviation (SD) of times a participant reported participation in an activity from each category

Leisure category	Number of reported activities	Mean number of activities per participant (SD)
Social activity	941	3.01 (1.42)
Screen activity	912	2.91 (1.10)
Miscellaneous activity	602	1.92 (1.09)
Sport activity	448	1.43 (1.15)
Risk activity	235	.75 (1.05)

Participants were asked to select the five most time consuming (MTC) leisure activities that they participated in during an average week. For each of these five activities, participants reported how many hours a week was spent on the activity and indicated whether the activity was participated in by oneself, with one or two friends, in a group, or with family (or a family member).

Firstly, frequency data were obtained for the first most time consuming activity and are displayed in Table 2. The trend, noted in this table, in participation in types of activity was similar for the second, third, fourth and fifth MTC leisure preferences (see Appendix E for the frequency data on the second to fifth MTC activities).

Table 2.

Frequency data of who students participate with in their first most time consuming activity and what they usually participate in.

Who They Participate With	%	What They Participate In	%
"By myself"	36.4%	watching TV/videos	28.9%
		listening to music	15.8%
		reading	11.4%
		playing computer games	10.5%
"In a group"	27.2%	hanging out	22.4%
		rollerblading/skateboarding	10.6%
"With 1 or 2 friends"	23.0%	hanging out	26.4%
		at a friend's house	19.4%
		watching TV/videos	12.5%
"With family/a family member"	13.4%	watching TV/videos	64.3%

Chi-square tests were performed to investigate whether an association existed between leisure category (sport, social, screen, risk or miscellaneous) and who participated in the activity (by oneself, with one or two friends, in a group, or with their family/a family member) for each of the five MTC activities. As seen in Table 3, the two variables were found to be significantly associated in all five analyses.

Table 3.

Results of Chi-square (χ^2) analyses examining the association between leisure category of the five most time consuming activities and who participated in that activity.

Activity "rank" (most time consuming)	Pearson's χ^2	Significance
1 st	$\chi^2 (9, 306) = 204.32$	$p = .000$
2 nd	$\chi^2 (9, 294) = 226.21$	$p = .000$
3 rd	$\chi^2 (9, 287) = 162.33$	$p = .000$
4 th	$\chi^2 (9, 287) = 173.43$	$p = .000$
5 th	$\chi^2 (9, 264) = 140.23$	$p = .000$

In all five analyses, sport activity was related to 'in a group', social activity was related to 'with one or two friends' (except in the fifth MTC activity where it was related to 'in a group'), screen activity was related to 'by myself' and miscellaneous activity was related to 'by myself' (see Appendix F for frequency tables). The risk leisure category was omitted from these analyses because the number of participants in this category was too low to be included without violating major assumptions of the analysis.

Time spent on most satisfying types of leisure

Participants were asked to estimate the number of hours spent on each of the five MTC activities per week. Participants were also asked to provide satisfaction ratings for each of these activities. The satisfaction ratings for the different needs were averaged to produce a mean satisfaction rating for each of the five MTC activities (the higher the number, the more satisfaction was gained from the activity). Below, Table 4 shows the

means and standard deviations of the hours spent on, and the satisfaction gained from, these activities.

Table 4.

Mean number and standard deviation of hours (per week) spent on, and satisfaction gained from, the five MTC activities.

Activity "rank"(MTC)	Hours mean (SD)	Satisfaction mean (SD)
1 st	17.20 (11.88)	3.27 (.79)
2 nd	11.61 (9.09)	3.21 (.82)
3 rd	7.93 (5.98)	3.23 (.84)
4 th	7.02 (7.24)	3.22 (.83)
5 th	4.73 (4.23)	3.17 (.86)

The data in Table 4 show that the participants reported spending a progressively decreasing amount of time on each of the five MTC activities, with most time spent on the first MTC and the least amount spent on the fifth MTC. Although, the 1st ranked activity held the highest mean satisfaction rating and the 5th ranked activity provided the lowest mean satisfaction rating, the ratings did not decrease significantly.

A series of one-way ANOVAs were used to investigate the differences in mean satisfaction ratings given to the MTC activities as a function of leisure category. Significant differences in mean satisfaction rating for leisure category were found for the first, second, third, fourth and fifth MTC activities, where $F(4, 303) = 29.894, p = .000$; $F(4, 300) = 31.322, p = .000$; $F(4, 301) = 17.449, p = .000$; $F(4, 294) = 13.971, p = .000$; $F(4, 283) = 12.374, p = .000$, respectively.

Post-hoc Tukey's HSD tests revealed that in the first three MTC activities, significantly greater mean satisfaction ratings were found for sport activities than for social, screen and miscellaneous activities (in the fourth and fifth MTC activities, mean satisfaction for sport activities was only significantly greater than the mean satisfaction for screen and miscellaneous activities). Screen activities had mean satisfaction ratings significantly lower than sport, social and miscellaneous activities in the first, second and third MTC activities, and were significantly lower than sport and social activities in the fourth and fifth MTC activities.

Table 5.

Mean (and standard deviation (SD)) satisfaction ratings given to the leisure categories for the MTC activities.

Leisure category	1 st MTC mean (SD)	2 nd MTC mean (SD)	3 rd MTC mean (SD)	4 th MTC mean (SD)	5 th MTC mean (SD)
Sport	3.89 (.46)	3.92 (.58)	3.88 (.66)	3.76 (.72)	3.81 (.71)
Social	3.48 (.68)	3.44 (.70)	3.38 (.79)	3.41 (.77)	3.41 (.81)
Risk	3.33 (.74)	3.68 (.89)	3.39 (.97)	3.31 (1.1)	2.92 (.85)
Miscellaneous	3.11 (.71)	3.01 (.69)	3.23 (.79)	3.02 (.75)	3.03 (.89)
Screen	2.79 (.75)	2.70 (.72)	2.78 (.71)	2.81 (.74)	2.85 (.76)
Total mean (SD)	3.27 (.79)	3.21 (.82)	3.23 (.84)	3.22 (.83)	3.17 (.86)

Additionally, one-way ANOVAs were used to investigate the differences in the number of hours spent on leisure as a function of leisure category. A significant difference was found between the number of hours spent on leisure category for the first MTC activity, $F(4, 283) = 6.828, p = .000$. A post-hoc Tukey's HSD test revealed that the mean (M) time (hours per week) spent participating in sports activities ($M = 11.17$,

$SD = 8.15$), was significantly less than the time spent participating in social ($M = 19.17$, $SD = 12.03$), screen ($M = 19.63$, $SD = 12.42$) and miscellaneous ($M = 18.80$, $SD = 12.64$) activities (risk activity was not significant in this analysis due to the small N).

A significant difference was also found between the number of hours spent on leisure category for the second MTC activity, $F(4, 281) = 7.790$, $p = .000$, and the fourth MTC activity, $F(4, 276) = 3.496$, $p = .008$. Post-hoc Tukey's HSD tests for the second MTC activity revealed that the time spent on sports activities ($M = 6.58$, $SD = 4.31$) was significantly less than the time spent on social ($M = 15.55$, $SD = 12.22$), screen ($M = 11.93$, $SD = 8.19$) and miscellaneous ($M = 11.22$, $SD = 7.66$) activities. A significant difference in the number of hours spent on social and miscellaneous activities was also found.

Post-hoc Tukey's HSD tests for the fourth MTC activity revealed a significant difference in the number of hours per week spent in sport ($M = 4.50$, $SD = 2.42$) and social ($M = 8.72$, $SD = 8.62$) activities. The third and fifth MTC activities showed no significant difference between the number of hours spent on an activity as a function of leisure category.

Type of satisfaction gained from leisure activities

A series of one way ANOVAs were performed to identify what needs were being satisfied by participation in the leisure categories for each of the MTC leisure activities reported. Significant differences were found between leisure categories in the satisfaction of six needs. Due to the number of analyses used, a more conservative alpha

level was adopted for some of the analyses, and is specified where this occurred. Tables 6 through 10 display the significant F values for each of the most time consuming activities.

Table 6.

Results of ANOVAs examining the differences between need satisfaction ratings of different leisure categories for the 1st MTC activity.

Needs (type of satisfaction)	F values	Significance $\alpha = .003$
Sense of accomplishment	$F(4, 306) = 25.096$	$p = .000$
Increases knowledge about things	$F(4, 306) = 3.824$	N.S.
Helps develop close relationships with others	$F(4, 304) = 39.953$	$p = .000$
Relaxing / relieves stress	$F(4, 305) = 3.886$	N.S.
Develops physical fitness	$F(4, 305) = 98.736$	$p = .000$
The participation location is beautiful	$F(4, 304) = 4.124$	$p = .003$

Post-hoc Tukey's HSD analyses found that in the first MTC activity the adolescent's sense of accomplishment was most satisfied by participation in sport ($M = 4.40$, $SD = .69$) and miscellaneous ($M = 3.24$, $SD = 1.4$) activities.

Participation in social activities most satisfied the need to develop close relationships with others, with a mean satisfaction score ($M = 4.56$, $SD = 0.82$) significantly greater than those obtained from participation in sports, screen and miscellaneous activities. The need to develop physical fitness was most satisfied by participation in sport activities with a mean satisfaction score ($M = 4.89$, $SD = .36$) significantly greater than social, miscellaneous, risk and screen activities scores.

The aesthetic need was most satisfied by participation in sport activities with mean satisfaction rating ($M = 3.2$, $SD = 1.31$) significantly greater than that obtained

from participation in screen activities. These post-hoc tests reveal a trend that was similar for the other MTC activities.

Table 7.

Results of ANOVAs examining the differences between need satisfaction ratings of different leisure categories for the 2nd MTC activity.

Needs (type of satisfaction)	<i>F</i> values	Significance $\alpha = .05$
Sense of accomplishment	$F(4, 302) = 19.431$	$p = .000$
Increases knowledge about things	$F(4, 302) = .618$	N.S.
Helps develop close relationships with others	$F(4, 302) = 42.464$	$p = .000$
Relaxing / relieves stress	$F(4, 300) = 3.934$	$p = .004$
Develops physical fitness	$F(4, 302) = 93.379$	$p = .000$
The participation location is beautiful	$F(4, 302) = 7.790$	$p = .000$

Table 8.

Results of ANOVAs examining the differences between need satisfaction ratings of different leisure categories for the 3rd MTC activity.

Needs (type of satisfaction)	<i>F</i> values	Significance $\alpha = .01$
Sense of accomplishment	$F(4, 301) = 10.974$	$p = .000$
Increases knowledge about things	$F(4, 301) = 2.855$	N.S.
Helps develop close relationships with others	$F(4, 301) = 24.353$	$p = .000$
Relaxing / relieves stress	$F(4, 301) = 3.482$	$p = .008$
Develops physical fitness	$F(4, 301) = 66.938$	$p = .000$
The participation location is beautiful	$F(4, 301) = 9.089$	$p = .000$

Table 9.

Results of ANOVAs examining the differences between need satisfaction ratings of different leisure categories for the 4th MTC activity.

Needs (type of satisfaction)	F values	Significance $\alpha = .015$
Sense of accomplishment	$F(4, 296) = 8.812$	$p = .000$
Increases knowledge about things	$F(4, 296) = 3.249$	$p = .013$
Helps develop close relationships with others	$F(4, 296) = 31.954$	$p = .000$
Relaxing / relieves stress	$F(4, 295) = 2.977$	N.S.
Develops physical fitness	$F(4, 296) = 83.454$	$p = .000$
The participation location is beautiful	$F(4, 295) = 5.943$	$p = .000$

Table 10.

Results of ANOVAs examining the differences between need satisfaction ratings of different leisure categories for the 5th MTC activity.

Needs (type of satisfaction)	F values	Significance $\alpha = .05$
Sense of accomplishment	$F(4, 283) = 11.978$	$p = .000$
Increases knowledge about things	$F(4, 283) = 6.832$	$p = .000$
Helps develop close relationships with others	$F(4, 283) = 22.959$	$p = .000$
Relaxing / relieves stress	$F(4, 283) = .878$	N.S.
Develops physical fitness	$F(4, 283) = 52.935$	$p = .000$
The participation location is beautiful	$F(4, 283) = 4.399$	$p = .002$

From these analyses, which needs were being most satisfied by adolescent participation in the different types of leisure activities in the five MTC activities were identified. Below, Figure 1 shows the ranking of which needs are most satisfied in adolescent leisure participation. That is, it shows that the most predominant adolescent need being satisfied by their participation in leisure, across the five MTC activities, is the need for relaxation and stress relief.

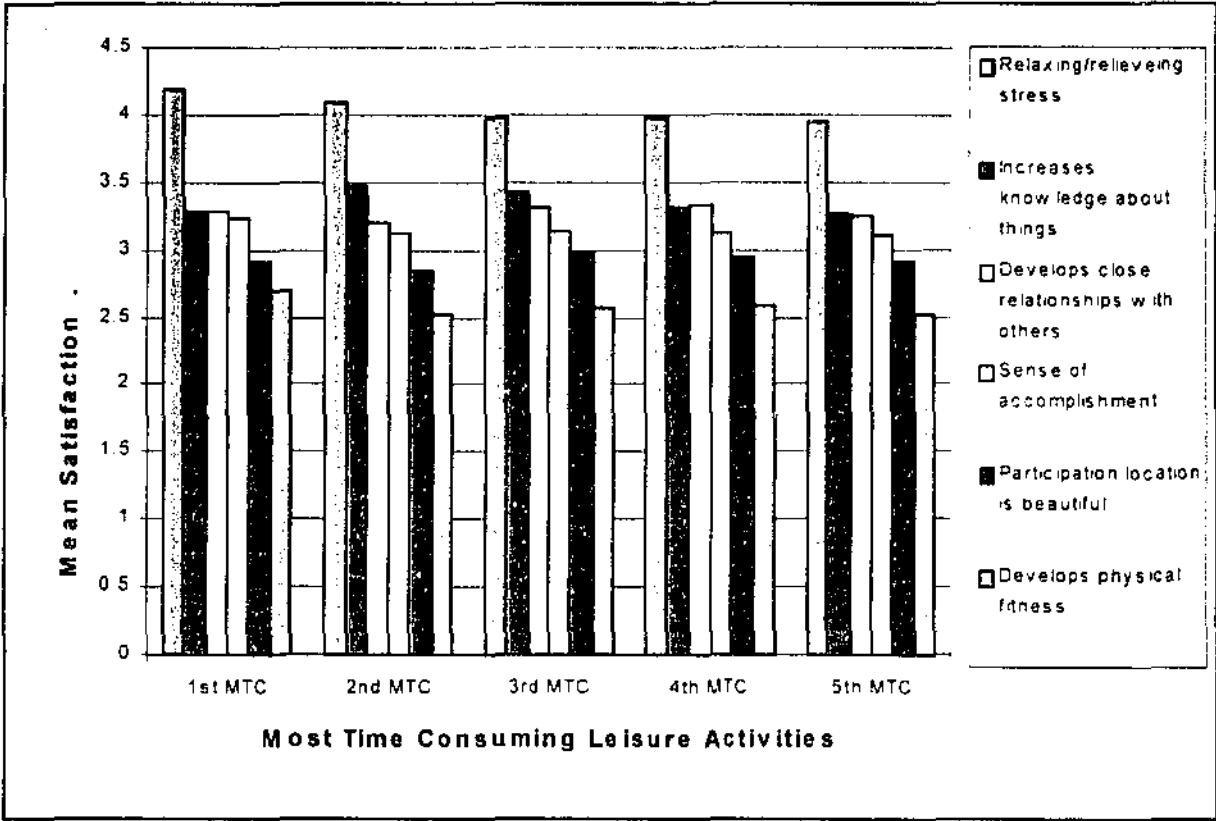


Figure 1: Mean satisfaction scores for the MTC activities.

Leisure behaviour and gender

Chi-square analyses were performed to investigate whether leisure category was associated with gender for each of the five MTC activities. The two variables were found to be significantly related in all five MTC activities, where $\chi^2(4, 313) = 32.938, p = .000$; $\chi^2(4, 310) = 12.922, p = .012$; $\chi^2(4, 310) = 15.443, p = .004$; $\chi^2(4, 305) = 21.583, p = .000$; $\chi^2(4, 292) = 10.874, p = .028$, respectively.

There was a general trend in which more males would consistently report participation in sport and screen activities than females (except in the fifth MTC activity where more females reported participation in sport than males). More females reported participation in social activities than males in all analyses, while participation in miscellaneous activities by more than the other gender alternated across the five MTC activities. Males dominated participation in risk activities except in the third MTC activity, where an equal amount of male and females reported participation.

Also of interest was the relationship between gender and the time the students spend on different types of leisure. Independent samples *t*-tests were performed to investigate the relationship between participant gender and the time (hours per week) spent on the first to fifth MTC activities. Significant differences were only found in the first and fourth MTC activities. The mean number of hours males and females spend on leisure categories ranked as the first MTC, are displayed in Table 11, below.

Table 11.

Mean number and standard deviation (SD) of hours spent (per week) on the First MTC activity in different types of leisure for males and females.

Leisure category (in rank order)	Male - hours/w mean (SD)	Female – hours/w mean (SD)
Social activity	26.44 (18.56)	17.56 (11.77)
Miscellaneous activity	25.37 (23.08)	18.81 (11.83)
Screen activity	21.41 (13.02)	16.53 (10.77)
Sports activity	12.36 (8.07)	7.81 (7.59)

In the first analysis, it was found that males spent more time on their MTC leisure activity than females, and significant differences between the genders were found in sports ($t(32)=2.088$, $p = .039$), and screen activities ($t(85)= 2.005$, $p = .048$). The difference between the genders on the time spent participating in social activities was approaching significance ($t(23) = 1.872$, $p = .074$), while no gender difference in miscellaneous activities was found (risk activities were not included in the analyses because there were no females in the analysis).

In the fourth analysis, a significant difference between males and females was only found in miscellaneous activities. Females ($M = 11.44$, $SD = 11.77$) spent significantly more time participating in these activities than did males ($M = 5.58$, $SD = 4.96$).

Family environment and participation in leisure activities

A split-half reliability analysis was conducted for the FES and an alpha of .34 was recorded for the raw sub-scale scores (for a comparison of these data to the

American normative data, see Appendix G). The ratings on four of the 10 sub-scales were used to categorise participants into four types of perceived family environments: Authoritative, Indulgent, Authoritarian and Neglecting. This reduced the sample size to $N=126$, with the most common perceived family being Authoritarian ($N=44$) and Indulgent ($N=43$) environments, followed by Authoritative ($N=30$) and Neglecting ($N=9$) family environments. Due to the similarity in trends found in previous results from the five MTC activities, it was deemed appropriate to investigate relationships, involving the family environment, based only on the first MTC activity.

A chi-square analysis was conducted to investigate whether an association existed between leisure category (sport, social, screen, risk or miscellaneous) and the type of family environment perceived by the adolescent. This analysis did not find any significant results.

Type of family environment and who (and how many others) participate in leisure

A chi-square analysis was also used to investigate the association between family environment type (Authoritative, Indulgent, Authoritarian or Neglecting) and with who (and how many others) adolescents participate in leisure (e.g., alone, with one or two friends, in a group or with family/a family member). This association was not found to be significant.

The amount of time adolescents spent participating in leisure with certain people as a function of family environment type was also of interest. Table 12 below, displays

the mean and standard deviation of the number of hours (per week) spent in leisure with certain people according to their family type.

Table 12.

Mean and standard deviation (SD) of number of hours (per week) spent in leisure with certain people according to family environment type.

Who they participate with	Authoritative - hours mean (SD)	Indulgent - hours mean (SD)	Authoritarian - hours mean (SD)	Neglecting - hours mean (SD)
"by myself"	12.31 (8.51)	20.18 (10.28)	21.34 (14.61)	9.20 (6.81)
"with 1 or 2 friends"	13.50 (6.35)	16.08 (10.98)	14.38 (7.62)	20.00 (.00)
"in a group"	19.71 (11.70)	12.33 (6.65)	7.00 (2.75)	30.00 (.00)
"with family / a family member"	16.80 (8.44)	25.83 (16.25)	12.50 (10.89)	6.50 (2.12)

The association between how many hours is spent in leisure with certain people and perceived family type was investigated using a univariate ANOVA. The analysis found no significant main effects, for family type or whom leisure is participated with, on the number of hours spent in leisure. However, a significant interaction was found between the two variables, $F(9, 100) = 2.416, p = .016$. Figure 1, on the next page, illustrates this interaction.

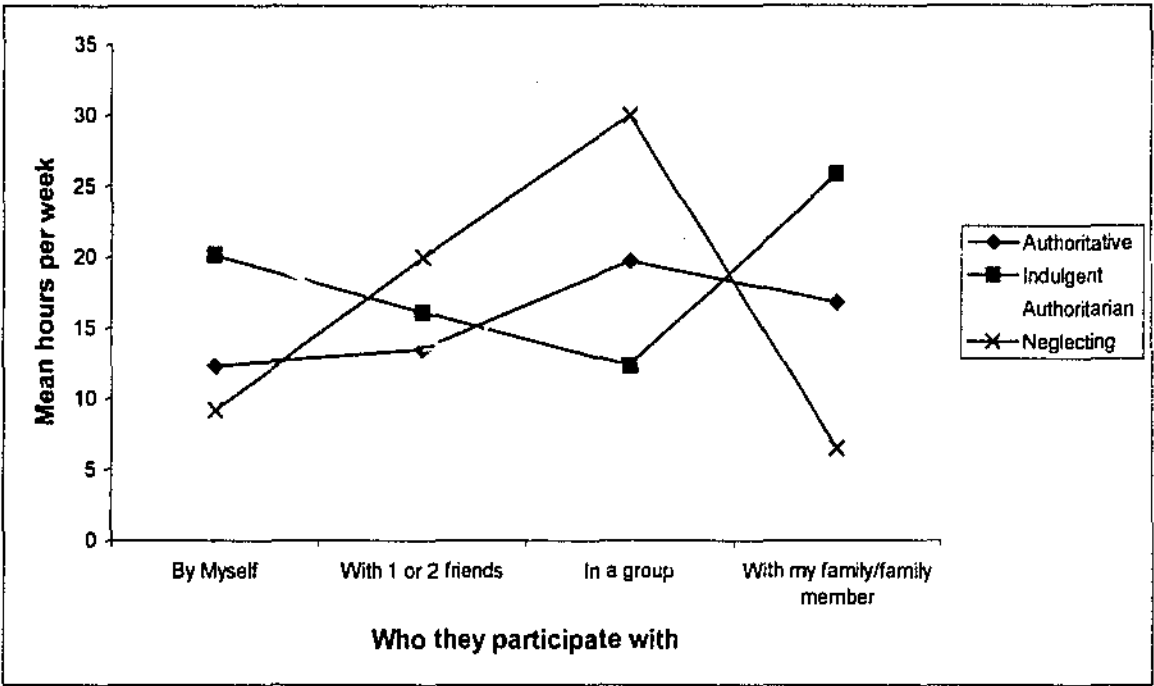


Figure 2: Adolescents perceptions of family type and the mean hours (per week) spent participating in leisure with certain people.

Leisure category, satisfaction of needs and the family environment

A series of univariate ANOVAs were used to investigate the differences in mean satisfaction of each need from participation in certain leisure categories as a function of family type. A significant main effect was found for family type on the satisfaction of the need to relax and relieve stress, $F(3, 106) = 3.438, p = .020$. A post-hoc Tukey's HSD analysis found a significant difference between satisfaction ratings of participants who perceive their family as Indulgent ($M = 4.53, SD = .63$) or Authoritative ($M = 3.93, SD = 1.05$) types.

The active-recreational orientation of the family and adolescent leisure behaviour

How the adolescent perceives the active-recreational orientation (ARO) of their family (i.e., high or low) and how it may be associated with adolescent leisure behaviour was of particular interest. Participant ratings of their family on this particular sub-scale of the Family Environment Scale were split at the median into two groups of roughly equal sizes; High ARO ($N=187$), and Low ARO ($N=126$).

A chi-square analysis was conducted to examine the relationship between ARO and the types of leisure adolescents participate in, but no significant relationship was found. A one-way ANOVA looked at the difference between the two family types, in the number of hours spent (per week) in leisure. No significant difference was found between the two groups.

A one-way ANOVA was used to investigate the relationship between the ARO of the family and the satisfaction ratings of each need. Significant differences in satisfaction ratings on three needs were found between the high and low ARO family groups. The significant F values are displayed in Table 13.

Table 13.

Significant F values from ANOVA investigating the relationship between the type of needs being satisfied by leisure and perceived family's ARO.

Need (type of satisfaction)	F values	Significance $\alpha = 0.05$
Helps develop close relationships with others	$F(1, 285) = 5.473$	$p = .020$
Develops physical fitness	$F(1, 285) = 4.912$	$p = .027$
The participation location is beautiful	$F(1, 285) = 4.691$	$p = .031$

On all three occasions, adolescents who perceived their family as having a high ARO were significantly more satisfied in these needs than those who perceived their family as having a low ARO.

Discussion

The present study examined adolescent leisure participation and the perceived family environment. The first objective of the study was achieved, by identifying the types of leisure activities adolescents most prefer to participate in, and with whom. Adolescents most preferred screen activities, participating usually by themselves; followed by social activities with one of two friends; miscellaneous activities by themselves; sport activities in a group; and preferred least to participate in risk activities.

The second objective of the study was to examine the relationship between the time spent on a leisure activity and the amount (and type) of satisfaction gained from that activity. The research found that the least amount of time was spent on the most satisfying activity, and that different leisure activities have different capacities to satisfy adolescent leisure needs. The third objective of the study investigated gender differences in leisure behaviour, and found that males and females have different preferences for leisure and also spend different amounts of time on their most preferred leisure activities.

The research also asked specific questions about the relationship between perceived family functioning and adolescent leisure behaviour. The first question was concerned with whether the adolescent's perceived family environment was related to his or her preference for certain leisure activities, and no such relationship was found to exist.

The second question was designed to explore the extent to which the perceived family environment determines with who (and how many others) adolescents participate

in their leisure. Results indicate that this relationship is moderated by the amount of time adolescents spend in leisure.

The third question focused on the extent to which the perceived family environment may relate to adolescent ratings of satisfaction with their preferred leisure activity. The results indicate that certain types of family environments may better facilitate the satisfaction of the need to relax and relieve stress, than other family types.

The final question was specifically concerned with the relationship between the active-recreational orientation of the family (being either high or low) and adolescent leisure behaviour. There was no evidence of a relationship between this family variable and what activities adolescents preferred, who they participated with, or the number of hours spent on their preferred leisure activity per week. There was however, an observed relationship between satisfaction ratings of certain leisure needs of the adolescent and the active-recreational orientation of the family environment.

Preferred adolescent leisure activities and whom they participate with

The analysis of results revealed that, for adolescents, the most frequently participated in leisure activity was watching TV / videos, followed by listening to music; going to a friend's house; going to the movies; and hanging out. Most of these leisure activities reported by the adolescents fell neatly into the four categories of social, screen, sport and risk activity. However, it was surprising to find such a large proportion of the number of reported activities to be categorised as miscellaneous activity. The five main categories of social, screen, sport, risk and miscellaneous activities encompass the vast

majority of leisure activities undertaken by adolescents in 2001. Social activities were the most frequently mentioned, followed by screen, miscellaneous, sport, and risk activities respectively; this is consistent with the findings of Fitzgerald et al., (1995).

While, on average, more social activities were reported per participant than screen activities, it is interesting to note that in four out of the five MTC activities, a higher percentage of people report participating in screen activities, usually by themselves, than any other type of leisure. In the five MTC activities reported by adolescents, social activities (participated in with one or two friends) were generally the next most preferred type of leisure, followed by miscellaneous (participated in alone), sport (with a group), and risk activities, respectively.

The data also showed that in all of the five MTC activities, adolescents most frequently participated in leisure activities by themselves. Next to spending time alone, adolescents frequently participated in leisure in a group and with one or two friends, and they participate in leisure with their family the least. This trend is not consistent with the findings of Montemayor (1982), who found adolescents to spend significantly more free time with peers, than with their parents or by themselves, while Fitzgerald et al. (1995) found their sample of adolescents to spend a large amount of time with their families, their best friend or with a group, and surprisingly, spend less time alone.

This inconsistency may be due to the high participation rates in screen and miscellaneous activities, which mainly involved participation by themselves, over social and sport activities, which require participation with others. Alternatively, the results may simply reflect the increasing behavioural autonomy associated with adolescence. The findings of this study resonate with those of Richards and Larson (1989), who

noticed a clear shift away from doing things with the family and toward doing them alone or with friends.

Possible reasons for the low number of sports activities reported as leisure are speculative. One explanation could be that these activities are usually more restricted by external constraints, such as lack of transport to sporting grounds, and lack of money to provide specialised equipment or to pay fees to participate. In comparison, a greater number of social, screen and miscellaneous activities are relatively free from such constraints.

The low participation rate in risk activities is encouraging, and may tentatively be explained in light of the research by Mainous et al. (1996). According to their research, the adolescents in this sample may not experience high enough levels of leisure boredom from the type of activities they engage in, and thus reduce the need to participate in risk activities such as vandalism, and alcohol and substance use. Having said this, the low participation rates in these types of leisure was one of the major limitations to the study, as it prevented comparisons with the findings of a large amount of research which has looked at adolescent characteristics in relation to risk (socially unacceptable) activities.

Time spent on most satisfying types of leisure

Analyses conducted to answer the question of whether adolescents spend amounts of time in a particular leisure activity that is relative to the amount of satisfaction they gain from that activity, have provided interesting results. During

participants' MTC leisure activity, significantly less time was spent on sports activities than on any other. In fact, the most amount of time was spent on screen activities (although not significantly different from the time spent in social and miscellaneous activities).

These results make sense, and are consistent with the finding in this study that the participation rates (in the different types of leisure) for the MTC activities followed this same order. That is, participation in sports activities is low, and for those who do participate in these activities, it is only for a short amount of time relative to the other types of activities. The fact that the least amount of time was spent participating in sports is consistent with the findings of Gordon and Caltabiano (1996), and may be due to the fact that, for most adolescents, opportunities for sport participation is usually during school hours (which is not included as leisure time). Therefore, it is feasible to think that, during adolescents' leisure, more time is spent on exploration and participation in activities not offered at school.

While the least amount of time was spent on sport, in all five of the MTC leisure activities, participants consistently reported obtaining a greater level of mean satisfaction from sport activities than from any other leisure category. This means that participation in sports satisfies more individual needs at once (for example, psychological needs, such as the need for a sense of accomplishment; and physiological needs) than participation in any of the other types of leisure.

This is in agreement with the findings of Beard and Ragheb (1980), who found that the younger the individual, the more satisfaction is gained from sports leisure. However, this is not consistent with Kleiber and Rickards (1985) argument that being

with significant peers (i.e., good friends) is a primary condition for satisfaction among adolescents. Sports activities are not necessarily participated in with friends (Hendry, 1983), whereas, social activities are associated with participation involving one or two friends.

At the other end of the scale, screen activities were consistently rated as significantly less satisfying than the other leisure categories (in all five MTC activities reported) and would appear to satisfy the least amount of individual needs at once. These results may lend support to Hendry's (1983) findings that high frequency screen activity participants are more likely to be bored during leisure time than those participating in sporting pursuits.

Taken together, the findings illustrate a novel relationship between the time spent on, and the satisfaction gained from, leisure activities. It is evident that adolescents do not spend the greatest amount of time on the activities that yield the greatest amount of satisfaction. If anything, there appears to be an inverse relationship between these two variables, where the least amount of time is spent on the most satisfying type of leisure. This does not support the findings by Beard and Ragheb (1980), where the extent of participation in different types of leisure activities is positively correlated with the satisfaction gained from the activity.

A large proportion of adolescents are spending a greater amount of time in leisure activities which are not as satisfying, as the other, more satisfying activities they participate in for less time. An understanding of this conundrum may come from an understanding of which specific needs are being met by participation in the different types of leisure.

Type of satisfaction gained from leisure activities

The observation that different types of leisure activities satisfy different needs across all of the five MTC leisure activities is consistent with the findings of Beard and Ragheb (1980), Garcia et al. (1995), Hearn (1990), and Hultsman (1993). Sport activities were found to play a significant role in developing an adolescent's sense of accomplishment and physical fitness, while also satisfying aesthetic needs, more than any other type of leisure. Satisfaction of these needs (particularly the first two) would contribute to the positive effects on self-concept and self-esteem that Garcia et al. (1995) found in young people who exercised regularly.

Screen activities were found to satisfy only one need significantly more than the other leisure pursuits: educational needs (to increase knowledge about things). This is in line with Hearn's (1990) view of the informational motivation behind TV watching, which included learning and reality exploration. However, adolescents' consumption of screen media did not seem to satisfy significantly the needs based on two other motivations that, as Hearn (1990) proposed, are behind screen leisure behaviour. These were the motivations pertinent to social needs and arousal management.

Hearn (1990) commented that screen activities, while engaged in frequently, are not part of the foreground of life. Instead, screen activities form a (taken for granted) backdrop to much of the adolescent's leisure time. That is, it becomes the thing to do when there is nothing else to do - satisfying little of the adolescent's needs yet consuming a large amount of time.

Unsurprisingly, social activities most satisfied the social need to develop close relationships with others, endorsing the reasoning by Beard and Ragheb (1980) that affiliation is an important factor in determining leisure choices. Arousal management (i.e., the need for relaxation and relief from stress) was not satisfied by any particular type of leisure activity significantly more than another. In fact, it can be concluded that all leisure activities play a - more or less - equal role in the satisfaction of this need. This is consistent with Beard and Ragheb's (1980) remarks that relaxation needs can be satisfied through restorative leisure such as play and sport. While it can also be satisfied through participation in more passive, solitary leisure pursuits such as screen and miscellaneous activities (Hearn, 1990; Hultsman, 1993).

It was also interesting to find that the type of need being most satisfied (having the highest mean satisfaction) by participation in all types of leisure activities was the need for relaxation and stress relief. Of second most importance was the need to increase knowledge about things (educational) and the need to develop close relationships with others (social). This information gives us an indication of why adolescents participate in leisure, and it appears that one of the main reasons is for the relaxational benefits of leisure participation. This seems to be an important need for the adolescents in this sample, as it was the most satisfied need reported across all five MTC activities.

A specific reason why relaxation is the dominant need being satisfied by adolescent leisure participation is speculative. It could simply be that after seven hours at school, all the adolescent wants to do is recuperate from a mentally, socially, and possibly physically challenging day.

Leisure behaviour and gender

There were clear and consistent findings, across all the MTC leisure preferences, of a gender difference in leisure participation. Males reported a greater involvement in the sports and screen activities, and females reported greater involvement in social activities, concurring with the results of previous studies by Colley et al. (1996), Fitzgerald et al. (1995), and Garton and Pratt (1991).

Not only do more males participate in sports and screen activities than females, but they also spend significantly more time in these activities than females. More adolescent boys participate in sports activities, as they are more likely to use sports and recreation as a means of coping with stress (Gibbons, Lynn & Stiles, 1997). This is apt given that relieving stress is one of the most predominant needs being satisfied by leisure participation.

The difference between males and females frequency in sports participation is also related to the different interactive styles they adopt during childhood play (Gibbons et al., 1997). Sports activities can play a larger role in occupying male leisure time as males tend to be more physically active and competitive than females (Hendry, 1983), and value achievement and recognition as a significant part of sport involvement. In comparison, females participate less in sport because they value affiliation and cooperation, and are less likely to find competitive sports appealing (Jobling & Cotterell, 1990).

The stronger involvement in screen activities shown by males may be due to their high participation in computer games, which accounted for a large proportion of

the reported screen activities. Again, males are socialised more to be competitive in their play, and it may be socially acceptable for them to be more highly involved in these activities (Hearn, 1990).

More females reported participation in social activities than males, possibly due to their earlier social maturity (Hendry, 1983). However, the difference, in the time spent in social activities, between males (who spend more time on this activity) and females, was approaching significance. This may be due to the generally greater amount of freedom (e.g., greater access to social activities outside the home, away from parents) afforded to adolescent males, as a result of the stigma attached to females as being more vulnerable to violence in society.

Family environment and participation in leisure activities

The study failed to find any association between perceived family environment and the types of leisure activity adolescents prefer to participate in. This result should not be taken to undermine the socialisation effects of the family on the development of adolescent leisure interests, attitudes, and habits (Parker, 1976). Rather, it was found that the emotional climate of the family (eg., the amount of perceived conflict) does not significantly influence (or is influenced by) the adolescent's decision to participate in particular types of leisure activities.

Type of family environment and who (and how many others) participate in leisure

No direct association was found between how the adolescent perceives his or her family environment and who they participate in leisure with most often. But it was interesting to find a significant interaction between these two variables concerning the number of hours adolescents spend in leisure. The results indicate that the amount of time an adolescent spends in leisure with certain people (e.g., alone, with friends, in a group, or with family) depends on how they perceive their family environment.

Authoritarian families are characterised by an environment of lower cohesion and expressiveness (low support) and higher levels of conflict and control (high control). Adolescents, who perceived their families as such, spent more time in leisure by themselves than they did in a group, with friends or their family; and spend more time in solitary leisure activities than the adolescents from any other type of family. It could be speculated that under high control conditions, the adolescent spends more time in the family home and chooses to spend this time alone rather than with a family from which they experience little cohesion or expressiveness coupled with high levels of conflict.

Neglecting families are characterised by low levels of support and control, creating an environment that is ignoring, indifferent and uninvolved in the adolescent's world (Foxcroft & Lowe, 1995). Participants who perceived their family as Neglecting spent more time either with friends or in a group, and spent the least amount of time alone or with their family. In an environment perceived as lacking in support, expression (of both positive and negative feelings towards each other), and having no set rules or

procedures in place to govern family life, an adolescent would need to become self-sufficient in seeking out his or her own positive socialisation experiences.

This speculation is given tentatively as the number of adolescents who perceived their family as Neglecting was very low. However, the results do not suggest anything that is inconsistent with the findings of Robertson (1999). She suggested that if the adolescent perceives the family as not being interested in sharing leisure time with them or in helping to facilitate satisfaction of their leisure needs, then satisfaction will be sought from elsewhere - adolescents will spend more leisure time with peers and are more likely to participate in delinquent types of leisure activities.

Adolescents, who shared the most amount of leisure time with their families, perceived them as being Indulgent. Indulgent families are characterised by low levels of control and high levels of support, indicating a permissive relationship. Adolescents, who perceive their families as such, tend to be impulsive and aggressive, and also lack independence and the ability to take responsibility (Foxcroft & Lowe, 1995). Therefore, it makes sense that these adolescents would be more dependent on their families to satisfy their leisure needs, because their family does it so well. This conclusion, that is in line with the thinking of Robertson (1999), who identifies that the extent to which the family can satisfy the adolescent's leisure needs, will determine how much leisure time is shared with the family.

Leisure category, satisfaction of needs and the family environment

While there was no main effect found for leisure category, the finding that the need to relax and relieve stress was significantly more satisfied by the leisure pursuits of adolescents who perceived their family as Indulgent, than those who perceived their family as Authoritative, was interesting. Robertson (1999) stated that the nature of the relationship between a parent and a child has been found to be a key factor in relieving stress, and ensuring that adolescents lead a stable and acceptable lifestyle. The present finding indicates that families perceived as Indulgent may be better able to facilitate the satisfaction of the adolescent's need to relax and relieve stress. This makes sense as it was reported above that adolescents who perceive their family environment in this way are more likely to spend their leisure time with them.

This finding is quite different to the original research question. Initially it was thought that the family would be influential in giving rise to certain needs within the adolescent, who would therefore participate in leisure activities that would satisfy these. However, quite the opposite was found. The results indicate that the family actually plays a role in (by facilitating or inhibiting) the satisfaction of needs that arise within the adolescent.

The active-recreational orientation of the family and adolescent leisure behaviour

It was a particular interest of this study to see if there was a direct relationship between the family environment's active-recreational orientation and adolescent leisure

behaviour. The active-recreational orientation of a family is a measure of the extent of participation in social and recreation activities, for example: how often friends come over for dinner or to visit, how often family members go out, and how often family members go to the movies, sports events, camping, and so on (Moos & Moos, 1994). Consistent with the findings above, there was no evidence of this relationship in regards to the type of leisure activities adolescents participated in. There was also no relationship found between the perceived active-recreational orientation of the family and the number of hours they spent in leisure, or with who they spend their leisure time with.

It was found however, that the active-recreational orientation of the family differentially facilitates the satisfaction of adolescent leisure needs. Participants, who perceived their families to have a high active-recreational orientation, were significantly more satisfied with their leisure pursuits when it came to developing close relationships with others, developing physical fitness, and participating in beautiful locations. This makes sense, as those who participated in social and sports activities also reported higher mean satisfaction ratings of these three leisure needs.

Conclusion

It would be premature at this stage to try to apply theory to the results obtained in this study, as measures did not tap into the theoretically important outcomes of leisure involvement, such as the adolescent's emotional well being or adjustment. Also, the family environment may influence an adolescent's leisure behaviour through a more

complex process, and these variables need to be identified (for example, self-concept and self-efficacy) and assessed. Despite the obvious limitations of the study, including the low response rate for participation in risk activities and the low reliability coefficient obtained for the FES, the study has still provided some relevant findings for the area of adolescent leisure.

The study has highlighted the variety and diversity of activities that - a relatively heterogeneous sample of - Australian adolescents participate in, in their spare time (while reassuring many parents that only a small percentage of adolescents actually participate regularly in risk activities). It has also provided some insight into the perceived family environments of Australian adolescents.

On the basis of the findings from this study, a number of conclusions are warranted:

- (1) Adolescents do not spend an amount of time in leisure activities that is relative to the satisfaction they gain from them. This may be due to external constraints on leisure (e.g., sports), and the tendency for young people to participate less in activities, which are not bound by external constraints, that satisfy more of their leisure needs at once. That is, adolescents are more likely to watch TV for hours, than to seek out the experience in real life.
- (2) Adolescents prefer to participate in leisure activities that satisfy their need to relax and relieve stress. All the categories of leisure had a - more or less - equal capacity to satisfy this leisure need.

- (3) Gender is a consistent predictor of the types of leisure activities adolescents will prefer to participate in. More males prefer to participate in sports and screen activities, and more females prefer to participate in social activities.
- (4) The extent to which the family, and other social groups (such as peers) can facilitate the satisfaction of the adolescent's leisure needs, will determine how much of the adolescent's leisure time is spent with the family, with friends, in a group, or alone. The extent to which the family can facilitate the satisfaction of the adolescent's leisure needs will depend on how it is perceived by the adolescent (that is, as Authoritative, Indulgent, Authoritarian, or Neglecting).

These findings may have important implications for youth leisure providers in making sure that, where the family may fall short, they may facilitate the satisfaction of adolescent leisure needs.

In trying to understand the influence of the family on adolescent leisure behaviour, future research should aim to explore a variety of interpersonal and intrapersonal factors (such as perceptions of self-concept). The family system is so complex, with so many possible interactions that it is difficult to say how it affects adolescent leisure behaviour. However, a focus toward adolescent participation in risk leisure activities and the satisfaction obtained from these may provide a clearer relationship. It would also be beneficial to the field if research focused on validating the present theories of leisure and adolescent development, in an attempt to create a coherent theoretical perspective of adolescent leisure behaviour.

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Appendix A

Leisure Questionnaire

This survey is intended to find out how you feel about the things you do in your leisure time.

By "leisure time" we mean the time after school and on the weekends where you get to decide what you are going to do.

Spare time does not include the time you spend on homework or playing compulsory school sport.

There are no right or wrong answers

Please answer each question as honestly as possible.

Grade: _____

Date of Birth: _____

Postcode (at home): _____

Gender (please circle): M / F

Who lives in your house? (eg: mum, dad, two sisters, etc.):

How many people live in your house? _____

♣ Below are some activities adolescents do in their spare time. Please tick the activities you do. There is also a space to write in any extra activities you do.

Netball.	Movies.	Taking illicit drugs.
Basketball.	Computer games.	Vandalism.
Hockey.	Musical instrument.	Any others?:
Ballet.	Listening to music.	_____
Football.	Reading.	_____
Parties.	Member of a club.	_____
Hanging out.	Drinking alcohol.	_____
Shopping.		
At a friends house.		
Watching TV/videos.		
Internet.		

♣ Thinking about the activities you have selected from (or added to) the list above, pick five of these activities that you choose to spend the most amount of time on per week and write them down below:

1. _____
2. _____
3. _____
4. _____
5. _____

✱Of these five activities, list them below in order of the one you spend the most time on each week to the one you spend the least time on, also stating approximately how many hours you spend doing it (each week), and who you do it with. Also, please indicate the type of satisfaction you get from doing this particular activity in the table provided.

1. Most time consuming activity: _____
No. of hours /week: _____

Who do I do this with: Myself
(most of the time) With one or two friends
 In a group
 With my family/a family member

✱ What type of satisfaction do you gain from this activity? According to each statement, please circle the number that represents your agreement or disagreement with the statement.

- 1 = Almost never true for me.
2 = Seldom true for me.
3 = Sometimes true for me.
4 = often true for me.
5 = Almost always true for me.

1. This leisure activity gives me a sense of accomplishment.	1	2	3	4	5
2. This activity increases my knowledge about things.	1	2	3	4	5
3. This activity has helped me to develop close relationships with others	1	2	3	4	5
4. This activity helps me to relax / relieve stress.	1	2	3	4	5
5. This leisure activity develops my physical fitness.	1	2	3	4	5
6. The areas or place where I engage in my leisure activities are beautiful.	1	2	3	4	5

2. Second most time consuming activity_____
- No. of hours /week: _____

Who do I do this with:
(most of the time)

Myself
With one or two friends
In a group
With my family/a family member

♣ What type of satisfaction do you gain from this activity?

According to each statement, please circle the number that represents your agreement or disagreement with the statement.

- 1 = Almost never true for me.
2 = Seldom true for me.
3 = Sometimes true for me.
4 = often true for me.
5 = Almost always true for me.

1. This leisure activity gives me a sense of accomplishment.	1	2	3	4	5
2. This activity increases my knowledge about things.	1	2	3	4	5
3. This activity has helped me to develop close relationships with others	1	2	3	4	5
4. This activity helps me to relax / relieve stress.	1	2	3	4	5
5. This leisure activity develops my physical fitness.	1	2	3	4	5
6. The areas or place where I engage in my leisure activities are beautiful.	1	2	3	4	5

3. Third most time consuming activity _____
No. of hours /week: _____

- Who do I do this with:
(most of the time)
- Myself
With one or two friends
In a group
With my family/a family member

✦ What type of satisfaction do you gain from this activity?
According to each statement, please circle the number that represents your agreement or disagreement with the statement.

- 1 = Almost never true for me.
- 2 = Seldom true for me.
- 3 = Sometimes true for me.
- 4 = often true for me.
- 5 = Almost always true for me.

1. This leisure activity gives me a sense of accomplishment.	1	2	3	4	5
2. This activity increases my knowledge about things.	1	2	3	4	5
3. This activity has helped me to develop close relationships with others	1	2	3	4	5
4. This activity helps me to relax / relieve stress.	1	2	3	4	5
5. This leisure activity develops my physical fitness.	1	2	3	4	5
6. The areas or place where I engage in my leisure activities are beautiful.	1	2	3	4	5

4. Fourth most time consuming activity _____
 No. of hours /week: _____

Who do I do this with:
 (most of the time)

Myself
 With one or two friends
 In a group
 With my family/a family
 member

♣ What type of satisfaction do you gain from this activity?

According to each statement, please circle the number that represents your agreement or disagreement with the statement.

- 1 = Almost never true for me.
 2 = Seldom true for me.
 3 = Sometimes true for me.
 4 = often true for me.
 5 = Almost always true for me.

1. This leisure activity gives me a sense of accomplishment.	1	2	3	4	5
2. This activity increases my knowledge about things.	1	2	3	4	5
3. This activity has helped me to develop close relationships with others	1	2	3	4	5
4. This activity helps me to relax / relieve stress.	1	2	3	4	5
5. This leisure activity develops my physical fitness.	1	2	3	4	5
6. The areas or place where I engage in my leisure activities are beautiful.	1	2	3	4	5

5. Fifth most time consuming activity _____
No. of hours /week: _____

Who do I do this with:
(most of the time)

Myself
With one or two friends
In a group
With my family/a family member

✦ What type of satisfaction do you gain from this activity?
According to each statement, please circle the number that represents your agreement or disagreement with the statement.

- 1 = Almost never true for me.
2 = Seldom true for me.
3 = Sometimes true for me.
4 = often true for me.
5 = Almost always true for me.

1. This leisure activity gives me a sense of accomplishment.	1	2	3	4	5
2. This activity increases my knowledge about things.	1	2	3	4	5
3. This activity has helped me to develop close relationships with others	1	2	3	4	5
4. This activity helps me to relax / relieve stress.	1	2	3	4	5
5. This leisure activity develops my physical fitness.	1	2	3	4	5
6. The areas or place where I engage in my leisure activities are beautiful.	1	2	3	4	5

Appendix B

The Family Environment Scale (FES)

The Family Environment Scale (FES) measures the social environment of all types of families. It is composed of ten subscales or dimensions, which are divided into three sets: the Relationship Dimensions, the Personal Growth Dimensions, and the System Maintenance Dimensions. These will be described below:

Relationship Dimensions:

Cohesion - measures the degree of commitment, help, and support family members provide for one another.

Expressiveness - measures the extent to which family members are encouraged to express their feelings directly.

Conflict - measures the amount of openly expressed anger and conflict among family members.

Personal Growth Dimensions:

Independence - measures the extent to which family members are assertive, are self-sufficient, and make their own decisions.

Achievement Orientation - measures how much activities (such as school and work) are cast into an achievement-oriented or competitive framework.

Intellectual-Cultural Orientation - measures the level of interest in political, intellectual, and cultural activities.

Active-Recreational Orientation - measures the amount of participation in social and recreational activities.

Moral-Religious Emphasis - measures the emphasis on ethical and religious issues and values.

System Maintenance Dimensions:

Organisation - measures the degree of importance of clear organisation and structure in planning family activities and responsibilities.

Control - measures how much set rules and procedures are used to run family life.

Some examples of the items in the questionnaire are as follows:

"Family members really help and support one another."	T/F
"We often talk about political and social problems."	T/F
"Getting ahead in life is very important in our family."	T/F
"It's often hard to find things when you need them in our household"	T/F
"There is one family member who makes most of the decisions."	T/F
"There is a feeling of togetherness in our family."	T/F
"In our family, we are strongly encouraged to be independent."	T/F

Appendix C

Researcher's Script for questionnaire administration

"Hi everyone, my name is Cath Price and I'm an honours student from Edith Cowan University. Today, I'm here to ask you to fill out a short questionnaire for me. By filling out the questionnaire, you will be taking part in a study on adolescent leisure activities and how that might relate to the family environment."

"Your names will not be recorded anywhere on the questionnaire, so your answers will be completely private. The answers you do give will be added to everyone else's and reported as totals. These totals will help us to understand reasons why adolescents participate in leisure activities."

"It is important that you know that you do not have to fill in this questionnaire if you don't want to. Also you do not have to answer any questions that you don't want to. You can also stop filling in the questionnaire anytime you want."

"The questionnaire should only take about 20 minutes of your time and your participation will be greatly appreciated. Does anyone have any questions? Well, If everyone's O.K. with everything then I'll pass out the questionnaires."

Appendix D

Leisure Activities and Category Groupings

Sport Activities:

netball	tennis	water polo	boxing
basketball	sailing	working out (at the gym)	lacrosse
hockey	cycling / riding bike / BMX	surfing / body boarding	lawn bowls
ballet	rollerblading / skateboarding	go karting	volley ball
football	horseriding	keeping fit	cricket
swimming	bowling	rugby	squash
dancing	walking	playing ball	umpiring
gymnastics	motor cross (X)	rock climbing	surf club
running / jogging	martial arts (Kung fu / Karate / Judo)	canoeing	yoga
soccer	table tennis	sport (in general)	
golf	ice hockey	scuba diving	

Social Activities

parties	member of a club/crew/gang	dating (boy/girlfriend)	playing with family / siblings
hanging out	talk on phone	discos / dance parties / clubbing	going out i.e., to the city
shopping	go out to eat		going to church
visit friend's house	"magic card" role play game		

Screen Activities

watching TV / videos	"veging out" (tv/video/computer)	LANing (Local Area Networking)
internet	computer	making music (computer program)
movies	computer programming	
computer games		

Risk Activities

drinking alcohol	“urban art”/ tagging	other illegal	smoking
illicit drug use	/ graffiti	activities	smoking and
vandalism	sex	drinking and drugs	drinking

Miscellaneous Activities

musical instrument	singing	decorate bedroom	mixing / making
listening to music	modelling	playing cards /	music
reading	drama	board games	remote control cars
camping	eating	crying	extra academic
playing with pets	volunteer / church	thinking	activities
sleeping	activities	building “stuff”	(maths, science,
killing bugs	masturbation	drip noising	languages, etc.)
band / orchestra	fishing	writing	wood work
art / painting /	study	origami	metal work
drawing	going to the beach	bumming around	making films
building models	cooking	catching public	gardening
		transport	

Appendix E

Frequency Data: What They Do and Who They Do it With

Frequency data of who students participate with in their 2nd most time
consuming activity and what they usually participate in.

Who They Participate With	%	What They Participate In	%
"By myself"	38.4%	listening to music	20.3%
		watching TV/videos	17.8%
		reading	16.1%
		internet	14.4%
"With 1 or 2 friends"	26.1%	hanging out	23.8%
		at a friend's house	22.5%
"In a group"	23.1%	hanging out	15.5%
		soccer	12.7%
"With family/a family member"	12.4%	watching TV/videos	71.1%

Frequency data of who students participate with in their 3rd most time
consuming activity and what they usually participate in.

Who They Participate With	%	What They Participate In	%
"By myself"	37.8%	internet	24.1%
		listening to music	20.7%
		watching TV/videos	11.2%
		playing computer games	10.3%
"With 1 or 2 friends"	26.4%	at a friend's house	18.5%
		hanging out	14.8%
"In a group"	25.1%	hanging out	16.9%
		parties	11.7%
"With family/a family member"	10.7%	watching TV/videos	42.4%
		shopping	21.2%

Frequency data of who students participate with in their 4th most time consuming activity and what they usually participate in.

Who They Participate With	%	What They Participate In	%
"By myself"	32.7%	listening to music	25.5%
		reading	16.3%
		playing computer games	15.3%
		internet	13.3%
"In a group"	30.0%	hanging out	15.6%
		parties	14.4%
"With 1 or 2 friends"	27.3%	at a friend's house	26.8%
		hanging out	17.1%
		movies	14.6%
"With family/a family member"	10.0%	watching TV/videos	40.0%
		shopping	13.3%
		movies	13.3%

Frequency data of who students participate with in their 5th most time consuming activity and what they usually participate in.

Who They Participate With	%	What They Participate In	%
"By myself"	36.5%	internet	26.0%
		listening to music	19.2%
		reading	11.5%
"In a group"	29.1%	parties	25.3%
		hanging out	10.8%
"With 1 or 2 friends"	22.5%	at a friend's house	23.4%
		hanging out	12.5%
		movies	10.9%
"With family/a family member"	11.9%	shopping	26.5%
		watching TV/videos	23.5%
		movies	20.6%

Appendix F

Frequency Tables for Chi-Square Analyses: Leisure Category and Who They Participate With.

First Most Time Consuming Activity

Who activity is participated with	Sport activity	Social activity	Screen activity	miscellaneous activity	Total
By myself	9	1	57	46	113
With 1 or 2 friends	11	40	10	9	70
In a group	45	26	5	5	81
With family / a family member	6	5	29	2	42
Total	71	72	101	62	306

2nd Most Time Consuming Activity

Who activity is participated with	Sport activity	Social activity	Screen activity	miscellaneous activity	Total
By myself	8	2	47	59	116
With 1 or 2 friends	12	46	11	7	76
In a group	33	24	5	2	64
With family / a family member	1	5	30	2	38
Total	54	77	93	70	294

3rd Most Time Consuming Activity

Who activity is participated with	Sport activity	Social activity	Screen activity	miscellaneous activity	Total
By myself	5	5	56	50	116
With 1 or 2 friends	6	37	19	6	68
In a group	32	30	4	4	70
With family / a family member	2	10	16	5	33
Total	45	82	95	65	287

4th Most Time Consuming Activity

Who activity is participated with	Sport activity	Social activity	Screen activity	miscellaneous activity	Total
By myself	7	2	42	46	97
With 1 or 2 friends	6	47	17	9	79
In a group	33	41	4	4	82
With family / a family member	2	6	18	3	29
Total	48	96	81	62	287

5th Most Time Consuming Activity

Who activity is participated with	Sport activity	Social activity	Screen activity	miscellaneous activity	Total
By myself	6	3	47	48	104
With 1 or 2 friends	5	29	18	2	54
In a group	25	37	6	7	75
With family / a family member	2	9	18	2	31
Total	38	78	89	59	264

Appendix G

Family Environment Scale Normative Data and Australian DataTable of mean subscale scores for normal and distressed American adolescents and Australian adolescents.

Subscales	Normal Adolescents - Mean (SD)	Distressed Adolescents - mean (SD)	Australian Adolescents - mean (SD)
Cohesion	6.23 (2.46)	5.01 (2.64)	5.55 (2.28)
Expressiveness	4.49 (1.93)	4.16 (1.83)	4.75 (1.86)
Conflict	3.90 (2.35)	4.91 (2.45)	4.09 (2.35)
Independence	6.02 (1.68)	5.56 (1.75)	5.89 (1.74)
Achievement Orientation	6.05 (1.68)	6.06 (1.69)	5.30 (1.71)
Intellectual-Cultural Orientation	5.04 (2.25)	4.36 (2.18)	4.89 (2.21)
Active-Recreational Orientation	5.86 (1.96)	4.76 (2.16)	5.86 (2.00)
Moral-Religious Emphasis	5.50 (2.05)	4.79 (2.18)	2.90 (2.17)
Organisation	5.38 (2.15)	5.30 (2.23)	4.29 (2.11)
Control	4.90 (2.01)	5.23 (2.08)	4.01 (2.19)